ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2010-0120; FRL-9169-2]

Revisions to the California State Implementation Plan, Imperial County Air Pollution Control District

AGENCY: Environmental Protection

Agency (EPA). **ACTION:** Final rule.

SUMMARY: EPA is finalizing a limited approval and limited disapproval of revisions to the Imperial County Air Pollution Control District (ICAPCD or the District) portion of the California State Implementation Plan (SIP) under the Clean Air Act as amended in 1990 (CAA or the Act). This action was proposed in the Federal Register on February 23, 2010 and concerns local rules that regulate coarse particulate

matter (PM_{10}) emissions from sources of fugitive dust such as construction sites, unpaved roads, and disturbed soils in open and agricultural areas in Imperial County.

DATES: *Effective Date:* This rule is effective on August 9, 2010.

ADDRESSES: EPA has established docket number EPA-R09-OAR-2010-0120 for this action. The index to the docket is available electronically at http:// www.regulations.gov and in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed in the index, some information may be publicly available only at the hard copy location (e.g., copyrighted material), and some may not be publicly available in either location (e.g., CBI). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the FOR **FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:

Throughout this document, "we," "us" and "our" refer to EPA.

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I. Summary of Proposed Action

On February 23, 2010 (75 FR 8008), EPA proposed a limited approval and limited disapproval of the following rules listed in Table 1, known collectively as Regulation VIII, that were adopted by ICAPCD and submitted by the California Air Resources Board (ARB) for incorporation into the California SIP for the Imperial County serious PM_{10} nonattainment area.

TABLE 1

Local agency	Rule No.	Rule title	Adopted	Submitted
ICAPCD	801 802 803 804 805	General Requirements for Control of Fine Particulate Matter Construction & Earthmoving Activities Bulk Materials Carry Out & Track Out Open Areas Paved & Unpaved Roads Conservation Management Practices	11/08/05 11/08/05 11/08/05 11/08/05 11/08/05 11/08/05 11/08/05	06/16/06 06/16/06 06/16/06 06/16/06 06/16/06 06/16/06 06/16/06

We proposed a limited approval because we determined that these rules improve the SIP and are largely consistent with the relevant CAA requirements. We simultaneously proposed a limited disapproval because some provisions of the rules conflict with the CAA section 110(a) requirement that SIP rules must be enforceable and the requirement in section 189(b)(1)(B) for implementation of best available control measures (BACM) in serious PM₁₀ nonattainment areas such as Imperial County. We discuss these statutory requirements and the Regulation VIII deficiencies in detail in the proposed rule and in the Technical Support Document for that proposal (proposal TSD).1 In the proposed rule and proposal TSD we also discuss our determination of which fugitive dust source categories addressed by Regulation VIII are significant and consequently require BACM pursuant to EPA guidance. This

determination was based in part on our 2009 decision 2 to not concur with the State's request pursuant to EPA's exceptional events rule 3 (EER) to exclude certain exceedances of the PM $_{10}$ National Ambient Air Quality Standard (NAAQS) in Imperial County from consideration in regulatory actions under the CAA. 4

We summarize the Regulation VIII deficiencies addressed in our proposed rule below. These deficiencies concern Regulation VIII provisions relating to open areas, unpaved roads and agricultural lands.

A. BACM-Related Deficiencies for Open Areas

1. Recreational Off-Highway Vehicle Activity

While recreational off-highway vehicle (OHV) 5 activity causes much of the PM₁₀ emissions from open areas in Imperial County, Rule 804 regulates only a small portion of these emissions, including those from OHV activity on State lands on which the rule is not being implemented. The vast majority of the OHV emissions in Imperial County are addressed only by requirements in Rule 800 section F.5 for dust control plans (DCPs) for sources under the control of the Bureau of Land Management (BLM). While BLM is required to describe in the DCPs the dust control measures that it intends to implement, BLM is not required to implement any specific BACM-level controls for OHV use. Moreover, ICAPCD has not provided an analysis of BACM for OHV activity, including

¹Our proposed rule and proposal TSD also describe additional improvements that we recommend for future ICAPCD modifications of the rules. This final action is not based on those recommendations. As a result, we do not respond here to all comments we received on them.

 $^{^2}$ Letter with enclosure from Laura Yoshii (EPA), to James Goldstene (ARB), Re: exceptional events requests regarding exceedances of the PM₁₀ NAAQS in Imperial County, CA, December 22, 2009.

^{3 40} CFR 50.1(j) and 50.14.

⁴ Issues related to the Regulation VIII deficiencies, significant source categories and our decision not to concur with the State's exceptional events requests are addressed further below in our responses to comments we received on the proposed rule.

⁵ As used here and in the proposal TSD, the term "off-highway vehicle" or OHV includes all vehicles subject to the exemption in Rule 800 section E.6 for recreational use of public lands in Imperial County.

potential OHV activity in open areas and on unpaved roads and paths that are exempt from the specific requirements and measures in Rules 804 and 805. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.⁶

2. Definition of "Disturbed Surface"

The term "disturbed surface area" is used in several Regulation VIII rules but is never defined. For example, Rule 804 applies to a source category for which BACM is required and relies on the undefined term to describe rule applicability in Rule 804 section B. A definition of this term is necessary in order to ensure that these rules are enforceable at a BACM level.

B. BACM-Related Deficiencies for Unpaved Roads

1. Unpaved Non-Farm Roads

While CAA section 189(b)(1)(B) requires ICAPCD to implement BACM by 2008 (i.e., four years after reclassification to serious),7 Rule 805 section E.7 allows the County until 2015 to stabilize heavily-travelled unpaved roads. This schedule is inconsistent with the statutory requirement and ICAPCD has not provided adequate evidence that this schedule is as expeditious as practicable, based upon economic feasibility or any other appropriate consideration. In addition, Rule 805 section E.7's requirement to stabilize all non-exempt unpaved County roads is not adequately enforceable as currently structured because it is not clear that the County is required to implement (and not just submit) a stabilization plan; stabilize different unpaved roads each year; and maintain all stabilized roads. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.8

2. Unpaved Farm Roads and Traffic Areas

Rule 805 section D.2 exempts agricultural roads and traffic areas from the opacity and stabilization requirements applicable to nonagricultural operation sites. Farm roads and traffic areas are only required to implement a conservation management practice (CMP) from the menus for

unpaved roads and traffic areas in Rule 806 in contrast to analogous rules in other geographical areas.

Rule 806 sections E.3 and E.4 list CMPs intended to control emissions from agricultural unpaved roads and traffic areas but these measures are broadly defined and there is no other mechanism in the rule to ensure specificity. The absence of sufficiently defined requirements makes it difficult for regulated parties to understand and comply with the requirements, and makes it difficult for ICAPCD or others to verify compliance and to enforce the requirements if necessary. The lack of specificity similarly renders it difficult to assess whether the measures constitute BACM level controls. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.9

3. Border Patrol Roads

Rule 800 section F.6.c exempts roads owned or operated by the U.S. Border Patrol (BP) from Rule 805 requirements that are "inconsistent with BP authority and/or mission." It is not clear what this exemption is intended to address, or how it would be implemented and enforced in order to meet BACM requirements. The proposed rule addresses how ICAPCD can correct these deficiencies. ¹⁰

C. BACM-Related Deficiencies for Agricultural Lands

1. Tilling and Harvesting

Rule 806 sections E.1 and E.2 list CMPs intended to control emissions from agricultural land preparation and cultivation (including tilling), and harvest activities, but these measures are broadly defined and there is no other mechanism in the rule to ensure specificity. The absence of sufficiently defined requirements makes it difficult for regulated parties to understand and comply with the requirements, and makes it difficult for ICAPCD or others to verify compliance and to enforce the requirements if necessary. The lack of specificity similarly renders it difficult to assess whether the measures constitute BACM level controls.

In addition, Rule 806 section E requires one CMP from the "land preparation and cultivation" category and one CMP from the "harvesting" category, while rules in other geographic areas have more stringent requirements.

The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies.¹¹

2. Windblown Dust

Windblown dust from non-pasture agricultural lands is also a significant source of PM_{10} that requires BACM independent of agricultural tilling. The CMPs in Rule 806 section E, however, mainly control emissions by reducing the number of vehicle passes across fields, and sources are not required to select BACM level practices for controlling windblown dust from active or fallow agricultural fields. The proposed rule and proposal TSD address how ICAPCD can correct these deficiencies. 12

D. Non-BACM Deficiency

Rule 802 section D.1 allows the Air Pollution Control Officer (APCO) to set aside controls that might be used instead of water to stabilize surfaces of bulk materials. This discretion allows ICAPCD to approve alternatives to the applicable SIP without following the SIP revision process described in CAA section 110. Moreover, ICAPCD has not demonstrated why such discretion is needed for measures such as covering, enclosing or sheltering material piles. The proposed rule addresses how ICAPCD can correct these deficiencies. 13

II. Public Comments and EPA Responses

EPA's proposed action provided a 30-day public comment period. During this period, we received nine unique comment letters from public agencies and broad-based organizations.

- Brad Poiriez, Air Pollution Control Officer, Imperial County Air Pollution Control District, March 25, 2010 (ICAPCD).
- Daniel Steward, Acting Field Manager, United States Department of the Interior, Bureau of Land Management, El Centro Resource Area, March 24, 2010 (BLM).
- Kathleen Dolinar, District Superintendent, Ocotillo Wells District, California State Parks, Off-Highway Motor Vehicle Recreation Division, by e-mail dated March 24, 2010 (OWD).
- Gail Sevrens, Acting District Superintendent, Colorado Desert District, California State Parks, by e-mail dated March 25, 2010 (CDD).
- David P. Hubbard, Gatzke Dillon & Balance LLP, on behalf of EcoLogic

 $^{^{6}}$ 75 FR 8008, 8010–8011 and our proposal TSD, section III.B.1.

 $^{^7}$ On August 11, 2004, EPA reclassified Imperial County as serious nonattainment for PM $_{10}$. 69 FR 48835. Since 2008 has passed, BACM is now required to be implemented as expeditiously as practicable. Delaney v. EPA, 898 F.2d 687 (9th Cir. 1990).

 $^{^8\,75}$ FR 8008, 8011 and our proposal TSD, section III.B.3.

 $^{^{9}\,75}$ FR 8008, 8011 and our proposal TSD, section III.B.4.

^{10 75} FR 8008, 8011.

 $^{^{11}\,75}$ FR 8008, 8011–8012 and our proposal TSD, section III.B.4.

 $^{^{\}rm 12}\,75$ FR 8008, 8012 and our proposal TSD, section III.B.4.

^{13 75} FR 8008, 8012.

Partners, Inc., March 25, 2010 (EcoLogic).

- Lisa T. Belenky, Senior Attorney, Center for Biological Diversity, March 25, 2010, representing several listed parties (CBD).
- Jose Luis Olmedo, Executive Director, Comite Civico Del Valle, Inc., March 25, 2010, submitted and joined by other parties (Comite).
- Ayron Moiola, Executive Director, Coalition of Labor, Agriculture & Business, March 24, 2010 (COLAB).
- Mark McBroom, President, Imperial County Farm Bureau, March 24, 2010 (Farm Bureau).

We also received over 100 comment letters from individuals and organizations associated with recreational OHV activities. We reference these comments below by their identification in the Federal docket management system (FDMS) found at regulations.gov. For example, the comment listed in FDMS as document number "EPA-R09-OAR-2010-0120-0219" is referenced below as "0219."

We summarize the comments and provide our responses below. In our responses we identify specific commenters in some cases but not in others, particularly where many commenters made similar points.

A. General

These overarching comments largely provide general support or opposition to our proposal.

General #1: CBD and Comite support EPA's proposal to find that the Regulation VIII submittal does not fully implement BACM level controls for all significant source categories in Imperial County, and support EPA's nonconcurrence with associated exceptional event requests. They ask EPA to finalize the proposed limited disapproval of Regulation VIII and to require additional PM₁₀ emissions restrictions. Many other commenters disagree with EPA's proposed limited disapproval, especially with EPA's identification of deficiencies for BACM requirements and EPA's nonconcurrence with exceptional events. ICAPCD, for example, believes that EPA's proposal is arbitrary and capricious, and that California has demonstrated that all required BACM are being implemented in Imperial

Response: No response is necessary for the overarching statements of support or opposition. Responses are provided below to the specific comments that support these general statements.

General #2: Several commenters believe that EPA's proposal lacks

adequate scientific support. One (0144), for example, states that passing sweeping air quality regulations in an area with unique terrain and climate with only generalities to prove the sources of pollution is unethical and appears anti-development, anti-OHV and anti-agriculture.

Response: The scientific support for EPA's action is documented in our proposal and the associated proposal TSD and discussed further in response to specific comments below. See, for example, response to comment EI #3 below. The serious health impacts of exposure to elevated levels of PM_{10} are well known and well documented and need not be reiterated here.

General #3: ICAPCD objects to EPA taking over four years to act on its submittals of Regulation VIII for

submittals of Regulation VIII for approval and claims that EPA is only now raising basic issues that ICAPCD believes should have been resolved before rule adoption. For example, ICAPCD objects to EPA disapproving a definition that it claims is clear and understood by all affected parties. ICAPCD and others (e.g., COLAB) comment that EPA never raised this and other concerns despite ICAPCD's extensive public process and communication with EPA before rule adoption. ICAPCD also cites EPA's testimony before the District Board in which the Agency supported Regulation VIII as BACM. As a result, ICAPCD concludes that EPA's proposal

undermines ICAPCD's ability to rely on EPA comments in the future.

Response: EPA reviews and comments on many draft State and local agency rules during their development prior to submittal to EPA for formal approval. It is generally more efficient for all parties to identify and resolve issues early in the process, rather than after rules are adopted and submitted to EPA for inclusion into the SIP. EPA's formal action on local rules, however, can only occur through notice and comment rulemaking after rules have been officially submitted to EPA by the State. If EPA determines during that process that a submittal does not fulfill relevant CAA requirements, we cannot approve the submittal. Given time and resource constraints, it is not always possible for the Agency to identify or analyze fully all issues before State or local rule adoption. Moreover, EPA must carefully consider all public comments submitted on proposed EPA actions on State and local rules. Such comments often identify issues and concerns that may not have arisen during the prior evaluation of drafts of a rule. We continue to believe, however, that communication between EPA and

State and local agencies at the rule development stage is productive.

General #4: OWD asks EPA to extend the comment period because it was informed of EPA's proposal only nine days before the close of the comment period. Several commenters also state that EPA did not provide adequate notification time (0218.1 and 0098) or consultation with State Park personnel (0218.1 and OWD).

Response: EPA denied OWD's request to extend the comment period because EPA is under a court order 14 to finalize action by June 15, 2010, and needs time to analyze all comments submitted on the proposal.¹⁵ While more time and outreach before EPA action is always desirable, nothing in the comments suggests that EPA failed to follow relevant public notification requirements found in the Administrative Procedures Act. 16 EPA notes that OWD did comment on the proposal and EPA has taken those comments into consideration in the final action.

B. State Implementation Plan (SIP)

These comments generally address broad SIP issues rather than specific Regulation VIII provisions.

SIP #1: OWD believes the PM₁₀ standard is nearly impossible to attain given Imperial's climate, natural desert condition, the cost of inappropriate BACM, and other local conditions. In contrast, Comite asks EPA to find that California has failed to submit a PM₁₀ plan as required by 72 FR 70222 (December 11, 2007), and to consider imposing associated CAA section 179 sanctions and a section 110(c) Federal implementation plan (FIP) in this area.

Response: Our proposed action addresses the CAA section 189(b)(1)(B) requirement for BACM for certain PM_{10} sources in Imperial County. The submittal at issue, Regulation VIII, is but one portion of the complete SIP that ICAPCD must develop in order to meet additional CAA requirements. These comments address the separate and broader statutory obligations for the State to submit a PM_{10} plan that, among other things, demonstrates expeditious attainment of the PM_{10} NAAQS. Those other obligations are not the subject of this action.

SIP #2: ICAPCD does not believe that any additional controls such as those that may need to be implemented if EPA partially disapproves Regulation VIII

 $^{^{14}}$ Comite Civico Del Valle, Inc., v. Jackson, No. 09–cv–04095 PJH (N.D. Cal.).

¹⁵ E-mail from Andrew Steckel, EPA, to Kathleen Dolinar, California State Parks, March 29, 2010.

¹⁶ See 5 U.S.C. 553.

will prevent PM₁₀ exceedances during high winds or otherwise materially benefit air quality on days unaffected by high winds. ICAPCD further believes that such additional controls will waste limited resources that should be used in other ways to improve local air quality in the area.

Response: CAA section 189(b)(1)(B) and EPA guidance ¹⁷ require that BACM be implemented for all significant source categories ¹⁸ in serious PM₁₀ nonattainment areas such as Imperial County. As explained in our proposal, ¹⁹ we determined that each of the subcategories under open areas, unpaved roads and agricultural lands below meet or exceed the 5 µg/m³ de minimis level in our guidance and are therefore significant source categories in Imperial County:

Open areas:

- —Windblown Dust, Other Open Area. Unpaved roads:
- —Entrained Unpaved Road Dust, City/County.
- —Entrained Unpaved Road Dust, Canal.
- —Windblown Dust, Unpaved City/ County Road.
- —Windblown Dust, Unpaved Canal Road.
- —Windblown Dust, Unpaved Farm Road.

Agricultural lands:

- —Tilling.
- —Windblown Dust, Non-Pasture Agricultural Lands.

As EPA stated in the guidance, the structural scheme throughout title I of the CAA, including its provisions for the PM₁₀ NAAQS, requires the implementation of increasingly stringent control measures in areas with more serious pollution problems. EPA further stated "that the more serious the air quality problem, the more reasonable it is to require States to implement control measures of greater stringency despite the greater burdens such measures are likely to cause." ²⁰ Imperial County continues to violate the PM₁₀ standard ²¹ and our proposed

action identifies several components of the State's Regulation VIII submittal relating to open areas, agricultural lands and unpaved roads that do not fulfill the CAA BACM requirement and the enforceability requirements of CAA section 110(a).

We further address ICAPCD's contention that additional Regulation VIII controls will not prevent PM_{10} exceedances during high winds in our response to comment EE #1 below.

ŜIP #3: Many commenters emphasize the importance of OHV areas in Imperial County for recreation, and believe that enjoyment of the desert should not be restricted. Commenters note that many organizations help keep the desert clean, and one commenter (0175.1) believes such efforts would be reduced if OHV areas are closed.

Response: Recreation, enjoyment of the desert and clean deserts are certainly desirable, whether for OHV use or otherwise. However, except as implicit in our response to comment OHV #5 below, they are not germane to the evaluation in our proposal and in this final rule of Regulation VIII and its compliance with the applicable CAA requirements.

 $\hat{S}IP$ #4: Two commenters (OWD and 0218.1) question whether EPA's proposal is based on statistically significant data since there were only three PM₁₀ exceedances within a three year period.

Response: ICAPCD's obligation to implement BACM for Regulation VIII fugitive dust sources derives from the Imperial County's designation as nonattainment and classification as serious. On November 15, 1990, the date of enactment of the 1990 Clean Air Act Amendments, Imperial County was designated nonattainment and classified as moderate.²² On August 11, 2004, EPA reclassified the area as serious in compliance with a mandate of the U.S. Court of Appeals for the Ninth Circuit.²³ The reclassification, pursuant to CAA section 188(b)(2), was based on a finding that the area failed to attain the PM₁₀ NAAQS by the statutory deadline of December 31, 1994. Once reclassified to serious, the area was required to comply with CAA section 189(b)(1)(B), which required that BACM be implemented for the area four years after its reclassification to serious.

The three exceedances to which OWD refers occurred during 2006 and 2007.

The State requested that these exceedances be excluded from use in regulatory actions pursuant to EPA's EER.²⁴ Because we did not concur with the State's request, BACM is required to be implemented for certain windblown dust source categories, including open areas, for which such controls would not have been required if we had agreed with the State.²⁵ See our responses to Exceptional Events comments below.

We also note that California has chosen to sample PM₁₀ in Imperial County only one out of every six days. As a result, by regulation, each monitored exceedance is estimated to represent approximately six exceedances rather than one.²⁶ For example, in 2009, ICAPCD reported three monitored exceedances at the Ethel Street monitoring site, which are estimated to represent 18.3 exceedances. Exceedances were also monitored at Brawley, El Centro, Westmorland and Niland in 2009.²⁷

SIP #5: Comite believes PM₁₀ should be further controlled in Imperial County by adoption of local fugitive dust ordinances like those in Coachella's Cathedral City, and by strengthening open burning regulations to be similar to those in the South Coast Air Quality Management District (SCAQMD) and the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD).

Response: We assume the commenter refers to title 8, chapter 8.54 of Cathedral City's municipal code which describes requirements for construction, unpaved roads and other local dust sources.²⁸ These requirements are generally similar to the type of controls adopted by SCAQMD (e.g., Rule 403), SJVUAPCD (e.g., Regulation VIII) and ICAPCD (Regulation VIII). The commenter does not identify any specific Cathedral City controls that it believes are needed in ICAPCD Regulation VIII to constitute BACM. Except where identified in our proposal, we believe ICAPCD's BACM analyses include adequate evaluation of analogous fugitive dust controls in other areas.²⁹ It is possible that the commenter is recommending duplicative city ordinances that overlap County-wide Regulation VIII. While such redundancy could improve compliance, it is generally not necessary

^{17 &}quot;State Implementation Plans for Serious PM–10 Nonattainment Areas, and Attainment Date Waivers for PM–10 Nonattainment Areas Generally; Addendum to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990;" 59 FR 41998 (August 16, 1994) (General Preamble Addendum).

 $^{^{18}}$ Under the General Preamble Addendum, a source category "will be presumed to contribute significantly to a violation of the 24-hour NAAQS if its PM_{10} impact at the location of the expected violation would exceed 5 $\mu g/m^3$." This is also referred to as the de minimis level. Id. at 42011.

 $^{^{19}\,75}$ FR 8008, 8010, and proposal TSD, pp. 5–7. $^{20}\,\mathrm{General}$ Preamble Addendum at 42010.

 $^{^{21}}$ EPA's Air Quality System Preliminary Design Value Report (May 18, 2010) shows 17 exceedances

of the 24-hour $PM_{10}\ NAAQS$ in Imperial County between 2007 and 2009.

²² 56 FR 56694 (November 6, 1991).

²³ 69 FR 48792; Sierra Club v. United States Environmental Protection Agency, et al., 346 F.3d 995 (9th Cir. 2003); cert. denied, 542 U.S. 919 (2004).

²⁴ See section II.D.1 below.

²⁵ 75 FR 8008, 8010 and proposal TSD pp. 5-7.

²⁶ 40 CFR part 50, appendix K.

²⁷ EPA's Air Quality System Preliminary Design Value Report (May 18, 2010).

²⁸ Cathedral City Municipal Code, title 8, chapter 8.54, Fugitive Dust Control; http://qcode.us/codes/cathedralcity/.

 $^{^{29}\,2009}$ PM $_{10}$ SIP table 4.2 and 2005 BACM analysis table 4.2.

to meet CAA section 110(a) enforceability requirements.

Finally, our proposed action only addresses the ICAPCD controls for certain PM₁₀ source categories encompassed by Regulation VIII, and therefore does not address control of open burning or many other air pollution sources in Imperial County. See also responses to comments SIP #1

SIP #6: Comite cites Vigil v. Leavitt, 381 F.3d 826, 834 (9th Cir. 2004) and Hall v. EPA, 273 F.3d 1146 (9th Cir. 2001), in commenting that measures in other areas can be considered BACM for Imperial County and are per se feasible. Comite further argues that what constitutes BACM can strengthen over time. In contrast, OWD does not believe that Imperial County should apply mitigation measures from other geographic areas (e.g., SJVUAPCD and Maricopa) that have different geologic and other local conditions. Similarly, COLAB believes that different cultural practices prevent ICAPCD from blindly implementing controls imposed in other areas, although the ICAPCD and SJVUAPCD CMP rules are very similar. Still another commenter (0119) claims that similar restrictions on construction, OHVs, farmers, etc., in Las Vegas and elsewhere have not been effective, and there is no need for such draconian and ineffective bureaucratic rules.

Response: EPA believes that it is appropriate, when evaluating what constitutes BACM for a given source category, to consider controls that have been adopted and implemented in other geographical areas. EPA agrees that the facts and circumstances in a given area can affect what constitute BACM for that area, but that this determination must be based upon appropriate consideration of relevant information

specific to that area.

Comite does not explain how the cited cases support its position. Nonetheless, we agree that in evaluating BACM for Imperial County, ICAPCD should analyze analogous measures in other areas and that BACM may strengthen over time. 30 Our proposal identifies several significant deficiencies in ICAPCD's analysis to date.31 While BACM is determined on a case-by-case basis 32 and, as such, the analysis can include evaluation of local conditions that might make specific controls economically and/or

technologically feasible in one area but not another, 33 neither the 2009 PM₁₀ SIP 34 nor the comment provides sufficient detail to adequately address the deficiencies identified in our proposal.

OWD does not explain how Imperial County differs so markedly from the San Joaquin Valley and the Maricopa area that it would be inappropriate to consider BACM approved in those areas as part of the evaluation of controls for the same source categories in Imperial County. Similarly, COLAB does not elaborate on what "cultural practices" in Imperial County would justify disregarding approved BACM in the San Joaquin Valley and the Maricopa area as part of the evaluation of what controls would be appropriate for comparable source categories in Imperial County.

C. Emissions Inventory (EI)

EI #1: Many commenters oppose further OHV controls because they believe OHVs contribute little to Imperial County's PM_{10} pollution problem compared to other sources. Commenters identify various sources they believe are more significant and/or should be further addressed instead, including fallow fields, fireplaces, feed lots, agricultural burning, pesticides, dirt roads, inefficient street lights, insufficient public transportation, insufficient speed limit enforcement, Interstate 8, the New River, the Salton Sea, Arizona to the east, San Diego to the west, Mexican roads, fires and factories to the south, rain, wind, erosion, dust storms and other natural occurrences. These commenters include OWD, 0096, 0097, 0150, 0139, 0152, 0180, 0192, 0194 and 0219.1.

Response: Our proposal explains that BACM is required for all significant PM₁₀ source categories in Imperial County, that windblown dust from open areas is a significant PM₁₀ source category, and that OHVs greatly increase emissions from open areas in Imperial County.³⁵ Our proposal further explains that ICAPCD has not demonstrated implementation of BACM for open areas with respect to OHVs.³⁶ These conclusions are based on inventory information prepared by ICAPCD and ARB and used during development of

Regulation VIII and the 2009 PM₁₀ SIP.37

The inventory in the 2009 PM₁₀ SIP represents the most comprehensive information currently available on OHV emissions in Imperial County.³⁸ ICAPCD's analysis in the 2009 PM₁₀ SIP concluded that windblown dust from open areas was not a significant source category, but this conclusion was premised upon many exceedences of the NAAQS being deemed to be the result of exceptional events. However, EPA's own conclusion regarding those exceedences is that they were not caused by exceptional events and, as a result, we consider windblown dust from open areas to be a significant source category that is subject to the CAA's BACM requirement. See response to comment SIP #4 and responses to Exceptional Events comments in section II.D below. Therefore ICAPCD has failed to meet the BACM requirement for windblown dust from open areas, in part because ICAPCD has not evaluated what controls might be appropriate for OHV activities in such areas.

EPA's action on the Regulation VIII submittal does not address or depend on whether additional controls may also be appropriate for the various other sources identified in the comments.

EI #2: One commenter (0188) had driven past many farms in El Centro during tilling and observes that the dust was very minimal. Another (0201) thinks more attention should be paid to agriculture which the commenter believes is exempt from many of the environmental regulations.

Response: See response to comment EI #1. Similar to emissions from open areas, EPA has concluded that emissions associated with tilling on and windblown dust from agricultural lands are significant source categories in Imperial County and, as such, ICAPCD needs to meet the BACM requirement for such sources.39

The commenter (0201) concerned about exemptions for agriculture did not specify which regulations exempt agriculture. As explained in our proposal, however, because certain agricultural-related activities constitute a significant source category for PM₁₀ in Imperial County, ICAPCD is required to meet the CAA's BACM requirements for such sources. Any "exemptions" for any such sources would need to be justified and explained in the context of meeting the BACM requirements.

EI #3: Several commenters claim that EPA has not proved the impact of OHVs

³⁰ General Preamble Addendum at 42013-42014.

³¹ E.g., OHV controls in Arizona Revised Statute § 49-457.03 and Clark County Air Quality Regulations, section 90 (75 FR 8011, February 23,

³² General Preamble Addendum at 42010 and

³³ In this respect, we do not agree with Comite that measures adopted in other areas are automatically transferable to Imperial County.

^{34 &}quot;2009 Imperial County State Implementation Plan for Particulate Matter Less Than 10 Microns in Aerodynamic Diameter, Final," adopted by ICAPCD Governing Board on August 11, 2009. (2009 PM₁₀ SIP).

 $^{^{35}\,\}mathrm{Proposal}$ TSD, pp. 5–8.

³⁶ *Id.* at p. 8.

³⁷ Id. at pp. 5-8.

 $^{^{38}\,2009}$ PM $_{10}$ SIP, Chapter 3; Appendix III.

³⁹ Proposal TSD, pp. 5-8 and 9-11.

on PM₁₀ levels sufficient to require additional OHV regulations. OWD notes, for example, that: (1) EPA did not analyze extreme terrain, thermal stability and other effects on winds in the desert; (2) most emissions from open lands come from undisturbed shrub/ grassland which are not anthropogenic sources; and (3) ICAPCD's 2009 PM₁₀ SIP, on which EPA relies, uses worstcase assumptions rather than actual soil condition information to estimate that OHVs represent less than 5% of the County's total PM₁₀ emissions (13.9 of 282 tpd). OWD states that 99% of these total emissions relate to OHVs subject to Federal and State stewardship. Therefore OWD concludes that actual OHV emissions are small compared to worst-case estimates. OWD also questions EPA's reference for the estimate of 22 tpd of windblown PM₁₀ from OHVs.

EcoLogic believes that EPA needs monitoring in the Ocotillo Wells State Vehicle Recreation Area (SVRA) and other areas to show how specific OHV activity affects sensitive receptors and for EPA to identify OHV activity as a major contributor to the County's PM₁₀ problem. Another commenter believes EPA lacks data tying PM to specific OHV activities (0218.1), and several commenters believe that any pollution from OHVs is virtually immeasurable. Several commenters believe additional inventory analysis is particularly important because OHV areas are far from population centers and monitors with PM₁₀ exceedances. One commenter (0131) requests an unbiased third-party study of OHV impacts. CDD explains that PM₁₀ emissions from several specific parks in Imperial County should be low, partly because OHV activity is prohibited. In contrast, CBD supports EPA's claim that OHVs on BLM land cause considerable PM₁₀ in Imperial County, and notes that BLM previously estimated PM₁₀ impacts from OHV activities at the Aldodones Dunes alone as high as 11 tpd on holiday weekends.

Response: It is extremely difficult to quantify and speciate accurately the myriad sources of PM₁₀ emissions and PM₁₀ precursor emissions spatially and temporally for purposes of modeling air pollution impacts and developing cost effective control programs. As a result, emission inventories are constantly being refined as more and better science and data become available. However, EPA, State and local air pollution agencies must make policy and regulatory decisions based on the best information available to comply with the CAA. As discussed in response to comment EI #1, the inventory and other information underlying our proposal regarding the emissions from OHV activity and the impacts of such activity represent the most comprehensive information currently available.

Regarding specific concerns in this comment:

- (1) EPA's conclusion that BACM is required for OHV activity relies on emissions inventory estimates that ICAPCD developed. If appropriate, ICAPCD could choose to refine those estimates to take into consideration factors such as terrain, thermal stability and other effects on winds in the desert, as well as distances between OHV areas and population centers and additional third party analysis. Such refinements are beyond the level of detail normally used in inventories required by CAA section 172(c)(3).⁴⁰
- (2) ICAPCD in its 2009 PM₁₀ SIP quantifies the impact of soil type and land cover (e.g., shrub/grassland) and degree of OHV disturbance in OHV emission estimates relied on by our proposal.⁴¹
- (3) ICAPCD used the best available information regarding soil types in open areas and determined that the remaining uncertainty does not affect the results of the technical analyses.⁴²
- (4) Even OWD's 13.9 tpd OHV emission estimate, which we believe is too low,⁴³ exceeds the presumptive 5 μg/m³ de minimis level for source categories requiring BACM.⁴⁴

(5) The reference for 22 tpd of windblown OHV emissions is accurately explained in our proposal.⁴⁵

The comment that monitoring is necessary in the Ocotillo Wells SVRA and other areas before EPA should require controls for OHV activities is incorrect. As stated previously, under CAA section 189(b) and EPA guidance, BACM is required for all significant source categories in the nonattainment area, including windblown dust in open areas caused by OHV activity. 46 Thus monitoring, which could provide valuable information, is nevertheless not necessary to determine which source categories require BACM.

D. Exceptional Events (EE)

1. Background

On March 22, 2007, EPA adopted a final rule to govern the review and handling of certain air quality monitoring data for which the normal planning and regulatory processes are not appropriate.⁴⁷ Under the rule, EPA may exclude data from use in determinations of NAAQS exceedances and violations if a State demonstrates that an "exceptional event" caused the exceedances. Before EPA can exclude data from these regulatory determinations, the State must flag the data in EPA's Air Quality System database and, after notice and opportunity for public comment, submit a demonstration to EPA to justify the exclusion. After considering the weight of evidence provided in the demonstration, EPA decides whether or not to concur with each flag.

On May 21, 2009, ARB submitted demonstrations for "high wind" events that allegedly caused ten exceedances of the 24-hour PM_{10} standard at various monitors in Imperial County in 2006 and 2007. The demonstrations consisted of the following support documents (listed in Table 2) prepared by ARB, ICAPCD, and ICAPCD's contractor, ENVIRON:

TABLE 2

Description	Document date	Abbreviated title
Natural Event Documentation: Calexico and Westmorland, California—September 2, 2006.	January 30, 2009	September NED.48
Natural Event Documentation: Brawley and Westmorland, California—April 12, 2007 [enclosed with June 13, 2008 letter to Sean Hogan].	April 15, 2008	Original April NED.

⁴⁰ See, e.g., AP–42, Fifth Edition, Volume I, Chapter 13: Miscellaneous Sources, 13.2.2—Unpaved Roads, Final Section, EPA, November 2006. This document provides EPA guidance on estimating emissions on unpaved roads and does not, for example, account for road terrain. http://www.epa.gov/ttn/chief/ap42/ch13/index.html.

 $^{^{41}\,2009}$ PM $_{10}$ SIP, appendix III.B.

⁴² 2009 PM₁₀ SIP, p. 3–2.

⁴³ In comparison to ICAPCD's 22 tpd estimate. Proposal TSD, footnote 32.

⁴⁴ As discussed on pp. 5–8 of the proposal TSD, depending on the specific monitor, 2–3% of Imperial County's annual inventory is calculated to

result in a 5 μ g/m³ contribution, which equates to about 6–8 tpd emissions.

⁴⁵ *Id*.

⁴⁶ See, e.g., proposal TSD, p. 5.

⁴⁷ "Treatment of Data Influenced by Exceptional Events," 72 FR 13560 (March 22, 2007) (EER).

TABLE 2—Continued

Description	Document date	Abbreviated title
Natural Event Documentation: Brawley, Calexico, El Centro, Niland, and Westmorland, California—June 5, 2007, Imperial County Air Pollution Control District [enclosed with June 13, 2008 letter to Sean Hogan].	April 15, 2008	Original June NED.
Natural Event Documentation: Brawley and Westmorland, California—April 12, 2007 [addendum to June 13, 2008 submittal].	March 12, 2009	April NED.
Natural Event Documentation: Imperial County, California—June 5, 2007 [addendum to June 13, 2008 submittal].	March 12, 2009	June NED.

As stated above in section I, on December 22, 2009, EPA denied ARB's request to exclude all of the exceedances as exceptional events. The basis for our decision is specified in an enclosure which accompanied the December 22, 2009 letter. ⁴⁹ By letter, including Attachment A and Appendix A1, dated March 3, 2010, ICAPCD asked EPA to reconsider this decision. ⁵⁰

Our proposal on Regulation VIII explained that our 2009 EE decision led to an adjustment of ICAPCD's significant source analysis which in turn led us to modify the list of significant sources for which BACM must be implemented in Imperial County under CAA section 189(b)(1)(B).51 As a result, our 2009 EE decision was the subject of public comments on our proposed action. ICAPCD resubmitted its March 3, 2010 letter, including Attachment A and Appendix A1, regarding our 2009 EE decision as Appendix C to its March 25. 2010 comment letter on our Regulation VIII proposed action.⁵² EPA also received comments pertaining to our exceptional events decision from Comite and CBD. A summary of these comments and our responses follow.

2. Events Not Reasonably Controllable or Preventable

EE #1: ICAPCD (Attachment) disagrees with EPA's interpretation of the requirement in the EER at 40 CFR 50.1(j) that in order for an event to meet the regulatory definition of exceptional event, such event must be "not reasonably controllable or preventable." Specifically ICAPCD takes issue with EPA's statement in our 2009 EE decision

that this criterion inherently implies "a requirement that the State demonstrate that anthropogenic sources contributing to the exceedance caused by the event were reasonably well controlled.' ICAPCD believes that under the plain regulatory language it is irrelevant whether "reasonable and appropriate" controls are in place on the day of an otherwise qualifying event when it can be shown that such controls would not reduce emissions and impact at the monitor sufficiently to prevent the exceedance. ICAPCD believes that it is inconsistent with the intent of the CAA for EPA to refuse to concur with an exceptional event claim solely due to EPA's dissatisfaction with the stringency of certain controls when such controls could not have prevented the exceedance.

Response: ICAPCD mischaracterizes both the plain language and the regulatory intent of 40 CFR 50.1(j) by reading the words "reasonably controllable or" out of that section. The regulation clearly requires a showing that the event is not either reasonably controllable or preventable, not as ICAPCD would have it, that the event cannot be controlled to the extent that no exceedance would have occurred. Furthermore, "control" as generally used in the CAA and EPA guidance (e.g., RACT and BACM 53), and as defined in the dictionary means to regulate or to reduce the incidence or severity.⁵⁴ Thus the meaning of the word "control" undeniably differs from the words "eliminate" or "prevent." Therefore, to meet the "not reasonably controllable or preventable" criterion in 40 CFR 50.1(j), states must demonstrate that reasonable controls were implemented to regulate or reduce emissions regardless of whether the controls would have

prevented exceedances.⁵⁵ Finally we note that the relevance of dust controls is inherent in the District's own characterization of the "event" as the combination of wind and dust entrainment from anthropogenic and nonanthropogenic sources.⁵⁶

As discussed in our 2009 EE decision, the State failed to demonstrate that reasonable controls were implemented for anthropogenic sources contributing to the exceedances, including recreational OHVs and fallow agricultural fields. ⁵⁷ Nor does ARB or ICAPCD provide convincing evidence in the NEDs or elsewhere to support the claim that controls on these sources could not have either prevented the exceedances or reduced emissions.

EE #2: ICAPCD (Attachment) further argues that the consequence of EPA's action would be to require control measures beyond the area's practical abilities—a result the EER is specifically designed to avoid. ICAPCD claims that other specific provisions are in place to prevent such difficulties, and ICAPCD quotes from EPA guidance: "If emissions from anthropogenic sources are reduced to the point that it is no longer technologically or economically feasible to reduce those emissions further, and the area still cannot attain the NAAQS, the EPA may consider waiving the serious area attainment date and appropriate serious area requirements." 58

Response: The provisions to which ICAPCD refers are contained in CAA section 188(f) which authorizes EPA to waive subpart 4 requirements applicable to serious PM_{10} nonattainment areas, including BACM, where EPA determines that anthropogenic sources of PM_{10} do not contribute significantly to the violation of the standard in the area. Under section 188(f), EPA may

⁴⁸ We refer to the natural event documentation in these five documents, collectively, as the NEDs.

⁴⁹ See footnote 2. We refer to our December 22, 2009 letter and the enclosure hereafter as "2009 EE decision"

 $^{^{50}\,\}rm Letter$ from Brad Poiriez (ICAPCD) to Jared Blumenfeld (EPA), March 3, 2010 with Attachment A and Appendix A1.

 $^{^{51}\,\}mathrm{See}$ 75 FR 8010 and the proposal TSD, pp. 5–7.

⁵² We refer to ICAPCD's March 10, 2010 letter with its Attachment A and Appendix A1, collectively, throughout our responses to the exceptional events comments in section II.D as "Attachment."

 $^{^{53}\,^{\}circ}\text{BACM}$ is the maximum degree of emissions reduction of PM $_{10}$ and PM $_{-10}$ precursors from a source * * * which is determined on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, to be achievable for such source through application of production processes and available methods, systems, and techniques for control of each such pollutant." General Preamble Addendum at 42010.

 $^{^{54}\,\}mathrm{Merriam\text{-}Webster's}$ Ninth New Collegiate Dictionary.

⁵⁵ Similarly, EPA explained in the preamble to the EER that analysis of exceptional events includes consideration of whether anthropogenic activities have been controlled to the extent possible through use of all reasonably available reasonable and appropriate measures. 72 FR 13560, 13566, footnote

⁵⁶ E.g., September NED, p. 9.

^{57 2009} EE decision, section 4.2.

⁵⁸ General Preamble Addendum at 42008.

also waive a specific date for attainment of the PM₁₀ standard if the Administrator determines that nonanthropogenic sources contribute significantly to a violation of the standard.

In guidance, EPA has established the same test for determining what constitutes a significant contribution for section 188(f) as is used for determining the sources for which BACM must be implemented under CAA section 189(b)(1)(B).⁵⁹ The passage in the guidance, quoted in isolation by ICAPCD, is preceded by a lengthy discussion regarding the circumstances under which a serious area such as Imperial County could qualify for section 188(f) waivers. That discussion makes clear that before EPA will consider waiving a serious area attainment date and requirements for a serious area that failed to attain the standard by the serious area deadline, the State must demonstrate that BACMs for significant anthropogenic sources have been implemented and that the area cannot attain the NAAQS with the implementation of additional control measures to achieve at least 5% annual emission reductions pursuant to CAA section 189(d). As discussed above and in the proposal,60 ICAPCD has not shown that BACM has been implemented as required by CAA section 189(b)(1)(B) for all significant source categories in Imperial County. 61 Thus it would be difficult to show that additional controls are "beyond the area's practical abilities" or "no longer technologically or economically feasible" without a more thorough BACM analysis.

EE #3: ICAPCD (Attachment) believes, citing the preamble to the EER, that the rule only requires reasonable controls for anthropogenic sources within the State.

Response: While Imperial County air quality may be affected by emission sources from areas outside California, such as Arizona and Mexico, our 2009 EE decision relies on the lack of demonstrated controls for anthropogenic sources within California.

EE #4: ICAPCD (Attachment) believes that EPA has not specified criteria for defining de minimis anthropogenic sources in the EER context, explained how the EER justifies such criteria, or described feasible analyses to implement such criteria.

Response: As noted above, our 2009 EE decision stated that inherent in the "not reasonably controllable or preventable" criterion of the definition of "exceptional event" in 40 CFR 50.1(j) "is a requirement that the State demonstrate that anthropogenic sources contributing to the exceedance caused by the event were reasonably controlled." We also suggested that this requirement be limited to "all non-de minimis anthropogenic sources." 62 In this case, however, rather than further interpreting the EER, we relied on statements in the NEDs acknowledging anthropogenic contributions in order to determine which anthropogenic sources were contributing to the 2006 and 2007 exceedances.63

EE #5: ICAPCD (Attachment) opposes the statement in EPA's 2009 EE decision that "because implementation of BACM is required in serious PM₁₀ areas such as Imperial County under section 189(b) of the CAA, it is appropriate to consider that level of control in evaluating whether reasonable controls are in place for purposes of the Exceptional Events Rule." Specifically, ICAPCD argues that (1) such a standard would create a new standard for exceptional event showings that is inconsistent with the language and intent of the EER which entails only "reasonable" and not "best" control of anthropogenic sources; (2) the purpose of the EER is to protect states from consequences of reclassification as a result of exceptional events; (3) by definition, exceptional events fall outside the normal planning process and their analysis should not depend on elements of the normal planning process including designation status; and (4) the meaning of "reasonable controls" for the EER should not vary by an area's nonattainment status and should not be as stringent as BACM.

Response: As stated in our 2009 EE decision and in the preamble to the EER, EPA addresses the EER criteria, including that the event must be "not reasonably controllable or preventable," on a case-by-case basis considering the weight of available evidence. 64 Thus it is appropriate to consider the totality of

circumstances in Imperial County in determining what constitutes "reasonable" controls. We note again that the County has been designated nonattainment and classified as moderate or serious since 1990. The area was reclassified to serious in 2004.

In evaluating rules as RACM or BACM, EPA has long considered it appropriate to consider local conditions since what is technologically and economically feasible in one area may not be in another. 65 Moreover, EPA's 2009 EE decision did not define reasonable control as BACM in all cases or suggest that the EER mandates such an outcome. Rather, we stated that "[b]ecause implementation of BACM is required in serious PM₁₀ nonattainment areas such as Imperial County under CAA section 189(b), it is appropriate to consider that level of control in evaluating whether reasonable controls are in place for purposes of the Exceptional Events Rule." 66 67 While ICAPCD states that this is inappropriate reliance on the normal planning process, an area's nonattainment designation and classification are inherently part of the local conditions that are appropriately factored into what controls are reasonable for purposes of the EER. We also noted that ARB had failed to demonstrate any meaningful analysis of BACM or any other level of control for either OHVs or fallow fields, despite apparent significant emissions and available controls imposed elsewhere.68

EE #6: ICAPCD (Attachment) comments that OHV emissions were quantified in the 2009 PM_{10} SIP at EPA's request, but EPA ignored this information in its analysis of the exceptional event requests.

Response: It is the responsibility of the State to submit demonstrations addressing the EER criteria ⁶⁹ to support its exceptional event requests and it is generally not appropriate or feasible for

⁵⁹ Id. at 42004.

 $^{^{60}\,75}$ FR 8008, 8010–8012 and proposal TSD, pp. 7–11.

 $^{^{61}}$ The 2009 PM $_{10}$ SIP for Imperial County that is intended to address the 5% requirement in CAA section 189(d) was adopted by ICAPCD in August 2009 but has not been submitted to EPA by ARB. The plan concludes that the area would have attained the PM $_{10}$ standard by the end of 2008 but for transported emissions from Mexico and with the "exclusion of PM $_{10}$ measurements affected by highwind exceptional events." As a result of the claimed exceptional events, with which we did not concur in our 2009 EE decision, the plan also concludes that "[t]he 5% yearly emission reductions requirement does not apply to future years." 2009 PM $_{10}$ SIP, section 5.3.

⁶² 2009 EE decision, section 4.2.

⁶³ See id., section 4.2.1.

⁶⁴ 2009 EE decision, pp. 4 and 7; 72 FR 13560,

 $^{^{65}\,\}mathrm{See}$ 57 FR 13498, 13540–13541 (April 16, 1992) and the General Preamble Addendum at 42010.

^{66 2009} EE decision, section 4.2.2; 72 FR 70222.

⁶⁷ We note that in EPA's Natural Events Policy which applied prior to the EER, we stated that "BACM must be implemented at contributing anthropogenic sources of dust in order for PM–10 NAAQS exceedances to be treated as due to uncontrollable natural events under this policy." This requirement applied to moderate areas which otherwise would not have been required to implement BACM at all as well as to serious areas. Thus, while the EER does not include such a mandate, it is entirely appropriate and consistent with the Agency's past practice to consider a BACM level of control in assessing whether reasonable controls are in place. Memorandum from Mary D. Nichols, EPA, "Areas Affected by PM–10 Natural Events," May 30, 1996, p. 5.

^{68 2009} EE decision, pp. 9-10.

^{69 40} CFR 50.14(c)(3).

us to correct NED deficiencies by searching for additional information. Nonetheless, we did review the 2009 PM₁₀ SIP before preparing the 2009 EE decision and did not ignore ICAPCD's efforts to quantify OHV emissions in the $2009 \text{ PM}_{10} \text{ SIP.}$ In fact, the 2009 EEdecision references these efforts which undermine the assumption in the NEDs 70 that windblown dust from desert areas is entirely from nonanthropogenic sources.71

EE #7: ĬCAPCD (Attachment) believes it is not clear whether OHV sources should be considered de minimis, what controls EPA expects for illegal OHV use, and why current regulations do not constitute reasonable controls.

Response: As stated previously, the State must demonstrate implementation of reasonable controls in documentation supporting exceptional events requests. It is possible that ICAPCD/ARB may be able to demonstrate in support of future exceptional events requests that OHV sources are de minimis, that there are no reasonable controls for OHVs under certain circumstances (e.g., certain illegal uses), and/or that existing regulations constitute reasonable controls. The 2009 EE decision, however, explains that the NEDs did not provide meaningful analysis of any level of control for OHVs, and that such analysis should include as a starting point evaluation of EPA's RACM guidance 72 and regulations adopted elsewhere under similar conditions.73

EE #8: ICAPCD (Attachment) comments that sand dunes are naturally fully disturbed and that the 2009 PM₁₀ SIP conservatively projects that OHVs contribute only 0.9 tpd (10%) to the total windblown emissions from them. Other commenters similarly question EPA's assumption that OHVs disturb desert crust. OWD, for example, notes that dune laminae are often mistaken for a crust but are broken by wildlife, foot

traffic and high winds.

Response: We agree that effective control of fugitive dust is more difficult for the sand dunes than for other parts of Imperial County with different soil types. As a result, the State may be able to demonstrate in support of future exceptional events requests, or for other CAA purposes such as section 189(b)(1)(B) BACM, that dust control for dunes should be different from and/or less stringent than controls required for other areas with different soil types. However, the September NED failed to provide meaningful analysis of

reasonable OHV controls for the sand dunes or any other areas. This comment has no bearing on the April and June NEDs because the sand dunes were not implicated by those events.

EE #9: ICAPCD (Attachment) comments that OHV activity and related direct PM₁₀ entrainment should have been negligible because of the high winds during the April 12 and June 5, 2007 events and thunderstorms on September 2, 2006. OWD notes that two of the exceedance events occurred during the OHV off-season and the third occurred in April, when OHV use is also low. Similarly, BLM comments that OHV use is lowest when dust potential is highest (June through September).

Response: Our 2009 EE decision appropriately relies on OHV emission information from the NEDs and the 2009 PM₁₀ SIP which estimate large windblown dust emissions and significantly smaller directly entrained emissions.74 Thus, even if no OHVs operate and entrain dust on any exceedance days, previous 75 OHV activity still contributes to PM₁₀ emissions by disturbing surfaces that subsequently emit windblown dust. As a result, documentation supporting future Imperial County exceptional events requests for events with significant emissions from OHV areas should include analysis of reasonable controls for OHVs even if there is no OHV activity during the exceedances.

EE #10: ICAPCD (Attachment) comments that Regulation VIII agricultural controls are well beyond the reasonableness level required in the EER. ICAPCD further states that it and ARB have discussed agricultural controls with EPA for many years, worked with EPA during development of the 2005 BACM analysis, closely modeled Rule 806 on SJVUAPCD Rule 4550 which EPA approved in 2004, and received EPA testimony in 2005 that Regulation VIII, including Rule 806, fulfilled BACM. ICAPCD also points out that the emission inventory in the plan shows that agricultural lands are significantly less emissive than most of the non-populated areas in Imperial County.

Response: Our 2009 EE decision explains that neither Regulation VIII nor any other programs require any level of emissions control of certain fallow fields in Imperial County. 76 Though ICAPCD comments that emissions from agricultural fields are smaller than

emissions from other sources in the County, the NEDs for the exceptional events requests do not identify any anthropogenic sources as being de minimis. Rather, there are summary explanations that anthropogenic sources are reasonably controlled through Regulation VIII and other local programs.⁷⁷ The only anthropogenic source discussed in any detail is agriculture in the April and June NEDs. These NEDs rely on the Imperial Irrigation District's (IID) fallowing program as the basis for claiming that reasonable measures were in place for fallow fields which are not subject to ICAPCD's Conservation Management Practices (CMP) Rule 806.78 However, there were approximately 32,000 fallow acres in Imperial County in 2007 that were not subject to either Rule 806 or IID's program which is more than the approximately 18,000 acres that were a part of IID's program in 2007.79 As explained in our response to comment EE #5, we stated in our 2009 EE decision that it is appropriate to consider a BACM level of control in evaluating whether reasonable controls are in place for purposes of the EER in Imperial County. However, EPA found no meaningful analysis of BACM or any other level of control for fallow land outside of IID's program referenced or provided in the NEDs.

EE #11: ICAPCD (Attachment) comments that EPA's 2009 EE decision fails to mention Rule 806 in the discussion of controls for agricultural lands. ICAPCD notes that fallowed land issues were included in the 2005 BACM analysis 80 and concludes that failure to address Rule 806 makes EPA's conclusions regarding agricultural areas

Response: EPA did consider and reference Rule 806 in our 2009 EE decision.81 Although the 2005 BACM analysis includes incidental references to fallow lands, neither it nor the NEDs attempts to quantify the fallow acreage in Imperial County. Nor has the State demonstrated how any existing windblown dust controls might constitute BACM for fallow fields outside of IID's program.

3. High/Unusual Wind Events

EE #12: Comite agrees with EPA's disapproval of ARB's request to exclude the monitored exceedances as

⁷⁰ E.g., June NED, p. 2.

⁷¹ E.g., 2009 EE decision, footnotes 12, 15 and 16.

⁷² 57 FR 18070, 18072 (April 28, 1992).

⁷³ 2009 EE decision, pp. 8-9.

⁷⁴ E.g., 22 tpd windblown and 1.34 tpd entrained emissions, 2009 EE decision, p. 9.

⁷⁵ Particularly recent activity where there has not been time or conditions to repair surface crusts.

^{76 2009} EE decision, section 4.2.3.

⁷⁷ April and June NEDs, pp. 13–14, and September NED, p. 18.

⁷⁸ April and June NEDs, p. 13.

⁷⁹ 2009 EE decision, p. 9.

⁸⁰ "Draft Final Technical memorandum: Regulation VIII BACM Analysis," October 2005 (2005 BACM Analysis).

^{81 2009} EE decision, p. 9.

exceptional events. In support of our disapproval the commenter makes several arguments: (1) That there is no statutory or regulatory authority which allows windblown dust from land that has been disturbed by human activity to be considered "natural;" (2) that while the final rule includes specific language regarding the treatment of anthropogenic emissions associated with fireworks and prescribed burns, it does not include special provisions for anthropogenic sources affected by the wind; (3) that the portion of the preamble which suggests dust from anthropogenic sources may be treated as natural events in certain circumstances was a drafting error and is legally null; (4) where the Act does allow for consideration of human activity, it is limited to activity that is unlikely to recur at a particular location and agriculture does not meet that definition; and (5) regardless of whether a high wind event is classified as "natural" or "human activity," such an event exists only where the wind is objectively a "high wind" and sufficiently high to cause a monitored violation even in light of the implementation of whatever measures are "necessary" to protect public health under CAA section 319(b)(3)(A)(iv).

Response: Comite's support for our decision not to concur with the State's exceptional events claims is noted. We agree with Comite that the events in question are not due to human activity that is unlikely to recur and that the State failed to demonstrate that the events qualify as natural events. However our conclusions with respect to natural events are not based on all of the legal arguments proffered by the commenter. We also are not relying on that portion of the preamble that the commenter correctly points out is a legal nullity 82 and instead, where appropriate, we rely on and cite to other parts of the preamble regarding natural events and high winds that remain applicable. While EPA's views of the statute and the EER differ from Comite's, we need not address Comite's arguments in detail because its intent was clearly to support the outcome we have reached regarding the exceptional events claims.

EE #13: Comite cites additional support for nonconcurrence with the State's 2007 exceptional events requests beyond what was relied upon by EPA, namely that wind speeds were not shown to be "exceptional" for the area or "unusual" since the State relied on flawed comparisons to average wind speeds.

82 NRDC v. EPA, 559 F.3d 561, 565 (DC Cir. 2009).

Response: For the 2006 events, the State did not assert that the winds were unusually high. For both sets of 2007 events, the evidence provided by the State did lead EPA to conclude that winds were unusually high. ⁸³ However, EPA's 2009 EE decision did not rely on the State's conclusions about unusual winds for any of the exceedances and we note that this commenter does not disagree with EPA's conclusions on the exceptional events, or with EPA's proposed limited disapproval of Regulation VIII.

4. Clear Causal Relationship

EE #14: Comite agrees with EPA that the State did not demonstrate there was a clear causal relationship between the exceedances and the events that are claimed to have occurred, as required under the EER. With regard to the 2007 exceedances, the commenter cites the lack of sufficiently detailed source attribution data. With regard to the 2006 exceedances, the commenter concludes that the proximity and nature of the thunderstorms that occurred in northwest Mexico made them "unlikely" to be the cause of the winds at Calexico. This commenter also believes that the possibility of any winds associated with thunderstorm activity north of the County being the cause of the Westmorland exceedance is "problematical at best."

Response: Comite's agreement with EPA's 2009 EE decision regarding the 2006 and 2007 exceedances is noted.

EE #15: ICAPCD (Attachment) objects to EPA's analysis of a section of the ARB documentation that compares September 2, 2006 to other days with similar meteorological conditions in order to establish a causal relationship between the claimed high wind event and the Calexico exceedances on September 2, 2006. ICAPCD also rejects EPA's concerns regarding the effect of emissions from OHVs and fallow fields on the September 2, 2006 Calexico exceedances. ICAPCD concludes that EPA's lack of sound technical understanding regarding the meteorological evidence and OHV and agricultural emissions led EPA to erroneously reject the State's finding of a "clear causal relationship" for the September 2, 2006 Calexico exceedances.

Response: In its documentation supporting its exceptional events request, the State compared PM₁₀ concentrations on September 2, 2006 to those on fifteen other days that had similar meteorology at Calexico.⁸⁴ The

PM₁₀ concentrations on most of the days were low, but on August 18, 2002, August 19, 2003 and September 2, 2006 the PM₁₀ concentrations were high. The concentrations on these days in 2002 and 2003 are described in attachments to the State's Natural Events Documentation 85 as being due to transport from Mexico under high wind conditions, and these conditions are stated to be meteorologically different than the other days at locations other than Calexico itself. Thus winds at Calexico were similar for all sixteen days, but on these specific days the wind elsewhere and the Calexico concentrations are higher. The State considered this to be evidence of an association or causal relationship between high wind elsewhere and high Calexico concentrations.

While we acknowledge that we misinterpreted the above portion of the State's argument in our initial analysis, our ultimate conclusion remains unchanged. As we discussed in our 2009 EE decision,86 the State's argument is flawed because there were in fact no high wind measurements on September 2, 2006; instead, the State merely assumed that wind speeds increased to the east. As a result, the association between the winds and concentrations that was seen for the events in 2002 and 2003 may not reflect what occurred on September 2, 2006. Thus our original conclusion is still valid because the fact remains that ARB's argument is founded on speculation. As we explained in our 2009 EE decision,87 such speculation is not adequate to establish a clear causal relationship.

Furthermore, as also discussed in our 2009 EE decision, 88 significantly lower PM_{10} measurements in neighboring Mexicali contradict ARB's assertion that the September 2, 2006 Calexico exceedances were caused by windblown dust from a large-scale, regional event that originated to the south or southeast of Calexico. Such an event would have affected both Calexico and Mexicali. ICAPCD itself concedes that its explanation for the Calexico exceedances does not account for the difference in the PM_{10} concentrations

^{83 2009} EE decision, pp. 19-20.

⁸⁴ September NED, pp. 12-14.

⁸⁵ September NED, p. 12, and Attachment G, "179B(d) 'But For' Analyses—High-Wind Events from Mexico", excerpt from Technical Support Document: Exclusion of PM10 Measurements in Excess of the 24—Hour PM10 NAAQS for Imperial County from 2001 through 2003 Due to Natural Events and Emissions from Mexico, Volume I of II, ENVIRON International Corporation, November 2004.

^{86 2009} EE decision, pp. 11 and 15.

⁸⁷ Id. at p. 11.

⁸⁸ Id. at p. 12.

measured at the Calexico and Mexicali stations.⁸⁹

ICAPCD further offers what it characterizes as the only three possible explanations for the Calexico exceedances, and suggests that EPA should accept the long range transport argument because it is the most plausible one. 90 To do so would be to make a decision based on a predetermined outcome rather than reliable scientific data that establish a clear causal relationship as required by the EER.

ICAPCD's next objection to our analysis of ARB's exceptional event request with respect to the September 2, 2006 Calexico exceedances is that EPA's concern regarding OHV and agricultural emissions 91 is not relevant because there are no OHV or domestic agricultural lands south, southeast or south-southeast of the Calexico monitors. EPA disagrees. The September NED states that the "source of the PM₁₀ that impacted the Calexico stations corresponds to lands east and southeast of the Mexicali stations * * *"92 In fact, as shown in the TSD for this final action,93 there is agricultural land immediately east of Calexico.⁹⁴ As also shown in the final TSD,95 the southern end of the Imperial Sand Dunes OHV area is also directly east of Calexico, though it is admittedly farther away. Thus consideration of these sources was not inappropriate.

In summary, we are not persuaded by the above comments and we reject the allegation that we did not have a sound technical understanding of the claims ARB made as to the cause of the exceedances. We therefore reaffirm our conclusion that ARB not only failed to demonstrate that a high wind event occurred, but also that there was a clear causal relationship between the alleged event and the September 2, 2006 exceedances at the Calexico monitoring stations.

EE #16: ICAPCD (Attachment) states that EPA mischaracterized some evidence and inappropriately dismissed other evidence provided by the State regarding a causal relationship between the claimed high wind event and the Westmorland exceedance on September

2, 2006, and that this led EPA to erroneously reject the State's finding of a clear causal relationship. The comment has three parts, relating to alleged EPA mischaracterizations of the timing of high winds, direction of thunderstorm travel, and wind trajectories.

Response: In response to this comment, we have again reviewed the wind data provided in the September NED and, as explained further below, we believe our original conclusion in our 2009 EE decision remains correct, i.e., that the data presented by ARB did not demonstrate a clear causal relationship between the claimed high wind event and the Westmorland exceedance on September 2, 2006.

The first part of ICAPCD's comment focuses on a statement made by EPA that the increased wind at Oasis toward Westmorland was simultaneous with the concentration spike that occurred at Westmorland during the 19th hour rather than an hour or two before, as would be necessary based on the distance between the two locations.96 We agree with the comment that the increased wind at Oasis did in fact occur the hour before the concentration spike. In addition, we stated that this wind was directed toward Westmorland when in fact it was directed toward the east-northeast.

ARB presented the wind speed and direction data in a tabular format that is difficult to interpret.⁹⁷ To more clearly articulate why we do not believe these data show a clear causal relationship between the event and the exceedance, we have presented the data in the final TSD in a visual form that is more readily understood.98 The arrows represent the wind directions at Indio, Oasis, Salton Sea West, and Westmorland during each of the four color-coded hours (e.g., all of the yellow arrows represent the wind direction during hour 17, etc.). The numbers above each arrow represent the wind speed for that hour, and the numbers below the Westmorland arrows represent the PM₁₀ concentration. The data show that the PM₁₀ concentration spike occurred during hour 19.

ARB claimed that thunderstorm outflows on September 2, 2006 led to high wind locally to the northwest and northeast of Imperial County, and that dust generated there was carried to Westmorland. More specifically, ARB stated the following:

Very high winds were observed at the 17th and 18th hours north of Imperial County,

both to the west (in particular at the Oasis CIMIS station, see Table 1) and to the east (see measurements at the Blythe, Ripley, and Palo Verde stations, Table 1). These strong winds were of very short duration and of changing direction * * *, consistent with the collapse of one or several thunderstorm cells north of Imperial County * * *. Very sharp peaks in PM₁₀ concentrations were also observed at the 19th hour at the Brawley and Westmorland stations (and to a lesser extent at the Niland station), and appear to be longrange effects of the same events (i.e. collapsing thunderstorm to the north of Imperial County) * * *. [A]n analysis of wind direction at select stations between the 18th and 20th hours indicates that northwest winds (e.g. 6 p.m. at the SSW and Indio stations, 7 p.m. at Oasis and Indio, and 8 p.m. at Indio) and east-northeast winds (e.g. 7 p.m. at the Niland and SSE stations) likely carried air containing elevated PM₁₀ concentrations from areas northwest and northeast of Imperial County stations toward the stations.(Emphasis added).99

ARB's explanation first points to the "very high" winds (of 23.2 mph) recorded at the Oasis station and the northwest winds at Salton Sea West during the 18th hour as factors that contributed to the exceedance. As a preliminary matter, we note 100 that no particular wind speed has been established as "high" for Imperial County. Further, winds with an average speed of 23.2 mph are not what we would consider "very high" in the generally accepted meaning of the term. With the exception of this value, the data in Figure 2 of our final TSD show that the winds in this area were not very elevated.101 We also note that the winds at Oasis during the 18th hour had a northerly component rather than a southerly one, and while it is true that the winds at Salton Sea West were blowing toward Westmorland at this time and that these winds could have contained some of the dust that may have been generated in the Oasis area, the winds at Westmorland were blowing in almost the opposite direction. It is thus unclear how much, if any, dust generated at Oasis during the 18th hour was actually transported to Westmorland.

ARB also points to the 7 p.m. winds at Oasis (hour 19) as a contributing factor. While these winds were directed

 $^{^{89}\,}ICAPCD$ Attachment A, Appendix A–1.

⁹⁰ Id.

 $^{^{\}rm 91}\,2009$ EE decision, p. 14.

⁹² September NED, p. 15.

⁹³ "Technical Support Document for EPA's Notice of Final Rulemaking on Revisions to the California State Implementation Plan, Imperial County Air Pollution Control District Regulation VIII—Fugitive Dust Rules 800–806" EPA Region IX, June 2010 (final TSD), Figure 1.

 $^{^{94}\,\}mathrm{Similar}$ land use maps were provided in Figure 3 of both the April and June NEDs.

⁹⁵ Final TSD, Figure 1.

^{96 2009} EE decision, p. 16.

⁹⁷ September NED, Tables 1 and 2, and Figure 19.

⁹⁸ Final TSD, figure 2.

 $^{^{99}\,\}mathrm{September}$ NED, pp. 10–11.

 $^{^{100}\,\}mathrm{As}$ we did in our 2009 EE decision, pp. 15 and 19.

¹⁰¹ EPA received comments on its proposed EER which stated that we should replace the term "high winds" with the term "wind-generated dust." In response to those comments, EPA explained in the final EER that the Agency chose to retain the original language because it accurately connotes the type of natural event that should be excluded under this rule and it serves as an indicator concerning the level of wind that caused the exceedance. See 72 FR 13560, 13566.

toward Westmorland, the winds at Salton Sea West had a distinct westerly component so it is not clear that the winds at Oasis continued on this path past Salton Sea West. In addition, as for the previous hour, the winds at Westmorland were blowing counter to the wind at Oasis and it is again not clear that any dust generated north of Imperial County was transported to Westmorland during this hour as ARB claims.

The State finally points to the 8 p.m. winds at Indio as a contributing factor. We find it unlikely that these winds made a significant contribution to the exceedance at Westmorland given that they were recorded after the concentration spike occurred and that the winds at Oasis, Salton Sea West, and Westmorland all had northerly components that ran counter to the winds at Indio.

As stated in our 2009 EE decision, 102 and as ARB stated in the paragraph quoted above, the winds northwest of Imperial County (particularly around the Oasis and Salton Sea West areas) were variable in speed and direction. This variability is inconsistent with ARB's hypothesis that the winds remained at an elevated speed and along a straight line over the 45 mile distance between Oasis and Westmorland for an hour or more. Thus it is anything but clear that dust generated northwest of Imperial County caused the exceedance at Westmorland. As a result, EPA's minor errors regarding the timing and direction of the winds at Oasis do not undermine the Agency's conclusion that the contradictory evidence does not support a finding of a clear causal relationship.

The second part of ICAPCD's comment on the causal relationship regarding the Westmorland exceedance argues that the speed and direction of the increased winds (27.0 mph) recorded at the Palo Verde station during hour 17 are consistent with transport to Westmorland and that the uncertainty of the precise location of the thunderstorms in time is not relevant to a cause and effect analysis. The commenter further states that EPA does not appear to argue that the wind speed or direction is inconsistent with transport of dust from Palo Verde to Westmorland.

While we agree with the commenter that the winds at Palo Verde (which is separated from Westmorland by a north-south distance of about 24 miles) were directed toward Westmorland during the 17th hour, the winds at Westmorland were consistently from the

south-southeast, southeast, and east-southeast directions beginning at the 6th hour and lasting until the end of the day. While it is remotely possible that the winds that occurred at Palo Verde during the 17th hour led to the transport of dust to Westmorland, the EER requires a demonstration of a clear causal relationship and the limited data available do not rise to that level.

We also disagree with the commenter that the location of the thunderstorms over time is not relevant to a cause and effect analysis. The EER explicitly mentions the use of data that show the relationship in time between the event, transport of emissions, and recorded concentrations in exceptional event demonstrations.¹⁰³ Furthermore, in this case, ARB's basic premise is that "thunderstorm activity caused strong outflow winds over areas in close elevated PM₁₀ concentrations that were recorded in Imperial County on that day." 104 ARB could have attempted to provide more support for its case by, for example, considering whether historical radar data showed thunderstorms were at various locations around the time the high winds occurred.

Given the level of uncertainty as to the cause of the concentration spike at Westmorland during the 19th hour and the statutory requirement that EPA's exceptional events regulations be based on the principle that protection of public health is the highest priority, 105 we are again led to the conclusion that the data before the Agency does not establish a clear causal relationship between the exceedance and the event that is claimed to have occurred.

The third part of ICAPCD's comment regarding causal relationship for the Westmorland exceedance criticizes EPA's use of wind trajectories from the HYSPLIT model since it is expected to capture the underlying flow pattern but may not be able to capture the direction of short-lived high winds that could transport dust from the north to Westmorland.

EPA acknowledges that the HYSPLIT model uses meteorological data with relatively coarse resolution, e.g., a 40 km grid, and that there may be shortlived or local deviations from the overall wind flow. However, it remains true that the HYSPLIT back-trajectories are inconsistent with transport from northern stations since they show winds from the south. 106 The HYSPLIT data

simply add to the list of inconsistencies in the State's explanation. In addition, ICAPCD's suggestion that the high winds were "short-lived" is inconsistent with ARB's hypothesis of straight line transport from the Oasis or Palo Verde stations for an hour or more over the 45–55 mile distance to Westmorland. Thus EPA disagrees with this comment.

EE #17: ICAPCD (Attachment) makes an additional two-part comment about the causal relationship claim for the September 2, 2006 exceedances at both the Calexico and Westmorland monitoring stations. In order to buttress its argument that these exceedances were not the result of recurring anthropogenic sources within Imperial Valley, ICAPCD first states that it is extremely unlikely that all monitors in the County would simultaneously have had unusually high PM₁₀ concentrations if the causes were local to the monitors. The second part of the additional comment states that since there were no high winds throughout Imperial Valley on September 2, 2006, the cause of the exceedances could not have been unpaved roads or agricultural or OHV land within the Valley.

Response: With respect to the first part of ICAPCD's comment, EPA acknowledged the elevation of PM₁₀ at all monitors, but did not take a position on whether the causes were local or regional. 107 Rather, we concluded that a clear causal relationship had not been demonstrated since the regional sources alleged by ARB to be the cause were not identified. Related to this lack of identification of the contributing sources, EPA found that the State did not demonstrate that the event was not reasonably controllable or preventable as there was no attempt to analyze controls on the non-local sources. Thus this comment does not affect our decision to not concur with the State's exceptional event claims.

With respect to the second part of ICAPCD's comment, as discussed above, the State argued that high winds associated with thunderstorm activity led to the generation of dust north of the County, which was then transported to the Westmorland monitor. Even though agricultural land and other anthropogenic sources do exist in areas north of the County including Oasis, 108 where the State claimed winds were high, the State made no attempt to analyze controls on contributing sources outside the County in order to address the EER requirement that the event must be "not reasonably controllable or preventable." Thus, this requirement

¹⁰³ 72 FR 13560, 13573.

¹⁰⁴ September NED, p. 2.

¹⁰⁵ See CAA section 319(b)(3)(A)(i).

¹⁰⁶ 2009 EE decision, p. 17.

^{107 2009} EE decision, p. 14.

¹⁰⁸ See Figure 1 in the final TSD.

was not met even if the commenter's arguments regarding transport were correct. With respect to the Calexico exceedances, the State speculated that high winds occurred east and southeast of Calexico based on extrapolation of a west to east trend of increasing wind speed. The same argument could have been used to conclude that there was high wind east of Calexico within Imperial County, including over agricultural and OHV lands. Therefore the commenter's claim that there were no high winds throughout the Imperial County is not completely supported by the State's own arguments that a high wind event occurred.

5. Concentrations in Excess of Normal Historical Fluctuations

EE #18: Comite cites additional support for nonconcurrence beyond what was relied upon by EPA. Specifically, the commenter states that numerous monitored exceedances comparable to those that Imperial County seeks to exclude from the data have been measured in the County from 2003–2007. Therefore, the commenter claims, the concentrations are not "in excess of normal historical fluctuations" as required by the rule and are not exceptional events.

Response: EPA's conclusions about the requirement that the events be associated with measured concentrations in excess of normal historical fluctuations mainly relied on the concentrations' rarity relative to past measurements. For example, the September NED states that the 167 µg/ m3 measurement at the Westmorland station was in the 98th percentile of all PM₁₀ recordings at that station in the 2001–2007 time period. As explained in our 2009 EE decision, 109 we found similar evidence that the exceedances measured on the other days in question also exceeded normal historical fluctuations. However, we do agree with the commenter that the monitoring data for Imperial County continue to show violations of the 24-hour PM₁₀ standard. We believe that improvements to the ICAPCD's rules will lead to improvements in air quality and we note that this commenter does not disagree with EPA's conclusions regarding the State's exceptional events requests, or with EPA's proposal to disapprove Regulation VIII.

6. Level of Documentation Required for EER

EE #19: ICAPCD (Attachment) takes issue with EPA's suggestions that additional data and analysis would have

helped establish causality for the 2006 Westmorland and the 2007 events. Specifically, ICAPCD states:

Although EPA suggests that higher levels of documentation for source attribution, thunderstorm activity, or investigation of other potential causes would be preferred EPA does not suggest reasonable, technically implementable analyses to achieve these higher levels of documentation. We would question what technical analyses EPA suggests should be conducted. We would also question whether these analyses and the required level of data are achievable or realistic now or in the future for similar events in Imperial County and in other areas (particularly those surrounded by remote, non-populated, non-monitored source areas), and whether these analyses exceed the requirements for SIP planning itself. EPA has not (and, we believe, cannot) propose reasonable, technically achievable investigations and analyses superior to those produced by the District and ARB that would address EPA's stated concerns. Thus, we find that both EPA's conclusions on causality and EPA's position on the level of analysis required to demonstrate causality are incorrect and inconsistent with the purpose of the EER * * *. Such a narrow application of the EER will preclude states from excluding from regulatory consideration exceptional PM data that are completely inappropriate for inclusion in the normal planning process.

ICAPCD also includes a table on page A–8 which cites specific passages of EPA's 2009 EE decision pertaining to source apportionment, satellite imagery, and consideration of other causes.

Response: Regarding the need for better source apportionment data, it is important to identify contributing sources when evaluating exceptional event claims involving windblown dust because it must be demonstrated that anthropogenic sources contributing to the exceedances at issue were reasonably controlled. 110 Better source identification is especially important in situations where we do not have confidence that all potential anthropogenic sources are reasonably controlled and where there are exceedances just above the NAAQS (such as the April 12, 2007 exceedance at Westmorland) which may have been preventable with additional controls. In addition, the inability to identify the source of the PM emissions associated with a wind event (i.e., the "cause" of the dust that led to the exceedance)

hinders our ability to make affirmative findings that the "clear causal relationship" and "but for" provisions of the EER have been satisfied. A Countywide monthly average emission inventory such as the one used by ARB that omits some source types (e.g., OHVs) is insufficient for these purposes.

While perhaps not required for all demonstrations, our suggestion for a wind field and a more highly resolved inventory are not unreasonable given ARB's failure in the present case to demonstrate that reasonable controls were in place for contributing sources. Moreover, a more highly resolved inventory would provide better support for any future exceptional events claims involving Imperial County. Another method ARB could have potentially considered for identifying the source of the emissions and supporting its claim of a causal relationship is to collect and examine pollutant species-specific information. As discussed in the EER preamble,111 such information may be available through routine speciation, monitoring networks, or from selective laboratory analysis of archived particulate matter filters for the day thought to be impacted by an event. In this case, such an analysis might have helped ascertain how much of the PM₁₀ that impacted certain monitors was from agricultural sources versus natural desert sources.

Regarding ICAPCD's objection to our statement that the satellite imagery provided was not frequent enough to compare the images with the timing of the concentration spike at Westmorland during the 19th hour, 112 we note that ARB could have provided additional information to supplement the satellite imagery. Such information could include, but may not be limited to radar data and weather observations that note the presence of blowing dust in areas around the monitors.

Finally, ICAPCD takes exception to our desire for better documentation regarding the investigation of other potential causes. In this regard, ARB made the following statement: 113

(ICAPCD) investigated emission generating activities during this episode, and found that PM_{10} emissions for BACM controlled sources were approximately constant before, during and after the event. The District determined that the * * concentrations of PM_{10} * * * were instead primarily the result of windentrained dust * * * associated with a mesoscale convective system * * *.

Although the preceding passage suggests that ICAPCD conducted an

¹⁰⁹ pp. 25–27.

¹¹⁰ See, e.g., 2009 EE decision, p. 7 and our responses to comments EE #s 1 and 4. See also 72 FR 49046, 49051 (August 27, 2007) and 72 FR 13560, 13566, footnote 11, explaining that the weight of evidence approach to our analysis may consider winds that produce emissions contributed to by anthropogenic activities that have been controlled to the extent possible through use of all reasonably available reasonable and appropriate measures.

^{111 72} FR 13560, 13573.

¹¹² 2009 EPA decision, pp 17–18.

¹¹³ September NED, p. 2.

active investigation of other emission generating activities on the day of the event, this claim is largely unsupported except for an interoffice memo included in Attachment H to the September NED. The memo states that various records were inspected in 2008 but that no inspections were conducted on the day of the event. We were thus left wondering how a file review conducted two years after the fact qualifies as an investigation of emission generating activities "during [the] episode" and how ICAPCD came to the somewhat substantial conclusion that emissions from BACM controlled sources were constant before, during, and after the

E. OHV Controls

OHV #1: ICAPCD believes that EPA should have concurred with all of the exceptional event requests associated with high winds as discussed in the Exceptional Events comments summarized in section II.D above. As a result, ICAPCD believes that windblown dust from open areas is not a significant source category in Imperial County, and therefore is not subject to the BACM requirement as part of the SIP.

Response: In our proposed action on Regulation VIII, we explained why windblown dust from open areas is treated as a significant source category subject to BACM.¹¹⁴ We have not received information in the comments or elsewhere that changes this conclusion or the related decision to not concur with the State's exceptional event requests for Imperial County. See also responses to Exceptional Events comments in section II.D above.

OHV #2: CBD comments that BLM land is the largest PM₁₀ source in Imperial County and should be subject to the same controls as adjacent land. CBD believes the Dust Control Plan (DCP) requirement for BLM land in Rule 800 section F.5 is unenforceable, in conflict with the CAA, while other areas are subject to more stringent Regulation VIII requirements.

In contrast, ICAPCD believes that Rule 800's DCP implements BACM, and that Rule 800's exemption for BLM does not relax other Regulation VIII requirements. For example, Rule 800 section F.5.c requires BLM's DCP to be consistent with Rules 804 and 805 except where otherwise prohibited, in which case section F.5.e requires all feasible control measures during offroad events. ICAPCD also notes that where there are such prohibitions, section F.5.d requires the DCP to discuss and implement "other possible

ICAPCD believes BLM should be treated separately in Regulation VIII because there are many restrictions imposed by a variety of laws other than the CAA that apply to actions on Federal lands and that the District's involvement in these issues would delay implementation of the PM control program on BLM lands. ICAPCD also believes that BLM should be treated separately because some Federal land uses preclude traditional dust controls and because BLM's OHV areas are far from Imperial County populations. ICAPCD argues that even if Rule 800 section F.5.c corresponds to requirements that are less effective than those of Rules 804 and 805, such lower stringency is both necessary and appropriate given the special nature of BLM lands.

BLM agrees that many traditional BACM are not possible on Federal land because of the large expanses of desert ecosystems. BLM continues evaluating the DCP, however, which has led to closing areas and routes to vehicle use, restoring closed surfaces to natural conditions, hardening high traffic areas, posting and enforcing speed limits, educating desert users, and controlling dust from non-OHV activities.

Response: BACM is required but has not been demonstrated for OHV activity on BLM land in Imperial County. 115 EPA guidance explains that this demonstration should include evaluation and documentation of the technological and economic feasibility of potential control measures, including implementation of measures on a limited basis if full implementation is not feasible. As stated in our guidance, "the documentation should compare the control efficiency of technologicallyfeasible measures, their energy and environmental impacts and the costs of implementation." 116 ICAPCD's demonstration should include careful consideration of analogous controls implemented on private lands in Imperial County and on public lands in Maricopa and Clark Counties and elsewhere, as well as controls recommended in EPA's RACM guidance,117 and suggestions provided

in our proposal 118 and comments on the proposal. 119

The evaluation of technological feasibility may appropriately consider the alleged "special nature" of BLM lands. Such an evaluation, if conducted appropriately, may be sufficient to demonstrate that what constitutes BACM for BLM land in Imperial County is different from what constitutes BACM in other geographical areas and for private land in Imperial County. The information provided in the comments and Regulation VIII submittal, however, is not sufficient to support such a distinction. For example, ICAPCD and other commenters have not demonstrated how existing BLM controls implement BACM in the Plaster City areas, which are open to OHV activity at all times, and, if such controls do constitute BACM, why they cannot be incorporated into Regulation VIII and the SIP.

Furthermore, with regard to CBD's comment concerning the enforceability of DCPs, State and local requirements that implement BACM are subject to the enforceability requirement of CAA section 110(a). As we stated in our proposal, BACM has not been demonstrated for OHV sources because, among other things, none of the OHV restrictions are in regulatory form and submitted for inclusion in the SIP. 120

OHV #3: OWD notes that California State Parks (CSP) manages OHV recreational activity in Imperial County at Heber Dunes State Vehicular Recreation Area, Ocotillo Wells SVRA, and in an interdepartmental joint management agreement at the Freeman Properties immediately north of Ocotillo Wells SVRA and east of Anza Borrego Desert State Park. OWD also notes that Ocotillo Wells SVRA alone represents approximately 85,000 acres of managed OHV recreational activity within Imperial County. While much of this land is designated trail riding only and is primarily defined by terrain constraints, OWD states that the majority of the area is designated open riding, where OHVs are not limited to defined trails. Rather than implement generalized BACM for OHV activity in Ocotillo Wells SVRA and other State Parks, OWD explains that it has adopted State mandated soil standards, a habitat monitoring system and other policies tailored for the case-by-case conditions found in each park unit. OWD believes

control measures" and that Rule 800 section D.3 requires the DCP to be submitted to ICAPCD, ARB and EPA for review and comment and to be updated every two years.

¹¹⁵ Proposal TSD, pp. 7–8.

¹¹⁶ General Preamble Addendum at 42012–42014.

¹¹⁷ 57 FR 18070, 18072.

 $^{^{118}}$ See proposal TSD, pp. 8 and 14–15.

¹¹⁹ Moreover, as stated in the General Preamble Addendum at 42013, "any control measures that a commenter indicates during the public comment period is available for a given area should be reviewed by the planning agency."

¹²⁰ Proposal TSD, p. 14.

¹¹⁴ Proposal TSD, pp. 5-7.

that fencing, and then maintaining, a vast amount of land is neither economically nor environmentally feasible. OWD also believes that watering, laying gravel, or applying a chemical solution to the miles of trails that would be encompassed is neither economically nor environmentally feasible. In contrast, CBD argues that further implementation of Rule 804 and additional OHV controls may be needed for State lands including the Ocotillo Wells SVRA in order to attain air quality standards.

Response: Rule 804 requires all persons, including public entities such as CSP, with jurisdiction over open areas in Imperial County with over 1,000 square feet of disturbed surface area to maintain a stabilized surface, limit opacity to 20% and comply with at least one of the following: (a) Apply and maintain water or dust suppressant to all unvegetated areas; (b) establish vegetation on all previously disturbed areas; or (c) pave, gravel or chemically stabilize. 121 OWD's comment acknowledges that CSP has jurisdiction over open areas with over 1,000 square feet of disturbed surface area within Imperial County. Because these areas are not addressed by exemptions in Rule 800 section E or Rule 804 section D,¹²² these areas must comply with the above requirements. However, from OWD's comment, CSP is clearly not currently complying with these requirements. As a result of the inclusion of Rule 804 into the SIP, these requirements will become federally enforceable upon the effective date of this final action, and such noncompliance could result in civil action under CAA section 113 and/or

OHV #4: Various commenters argue that controls suggested in our proposal as part of the BACM analysis that ICAPCD still needs to conduct would not reduce PM₁₀ impacts from OHVs in Imperial County.

• Many commenters oppose further restrictions during the summer, claiming that OHV activity and emissions are very low in Imperial County due to high temperatures and existing red sticker regulations that restrict certain vehicles during the summer. BLM concurs that OHV use is already lowest in the summer, and ICAPCD also concurs and argues that OHV restrictions during the summer would burden public resources without

reducing emissions. However, one commenter (0100) states that OHV use during summer nights is a great activity which creates minimal dust because travel is at low speeds on established trails. Another commenter (0204) indicates that many promoters run OHV races at night that allow for fun recreational activity in cooler temperatures. This commenter believes night races decrease risks to spectators which is more important than reducing dust emissions. Some commenters also observe that wind events can occur in the summer and cause severe dust days. By contrast, another commenter (0146) believes that the desert is mainly dry and free of wind in the summer.

- ICAPCD believes that restrictions like those in place in Arizona, during pollution advisory days, would be unproductive because high-PM forecasts in Imperial County only occur on highwind days when OHVs are not used.
- Many commenters (e.g., 0094) observe that OHVs are already restricted to certain areas, causing crowding and injuries. ICAPCD notes that OHVs are restricted to 11% of local BLM land, and additional closure would probably shift OHV activity and emissions to other areas nearby. OWD also believes EPA's action could force OHV users to other areas, causing environmental effects outside Imperial County.
- ICAPCD comments that EPA cannot demonstrate that OHV restrictions would reduce windblown dust emissions because there is no basis for EPA's contention that surfaces impacted by OHVs would form any appreciable crust given Imperial's low level of rain. OWD similarly comments that crust repair would be difficult due to the limited rain in Imperial County. Another commenter (0120) believes that restricting OHV areas could increase PM₁₀ emissions because more vehicles in smaller areas would disturb more soil that cannot crust over. See also comment EE #8.
- OWD comments that fencing, watering, gravelling or chemically stabilizing miles of OHV areas is not feasible. For example, water resources are scarce and modification of existing OHV trails could alter natural drainage patterns and increase erosion.

Response: EPA believes that some of the information provided in these comments could be relevant considerations in the comprehensive BACM analysis that ICAPCD needs to undertake in order to determine what controls constitute BACM for OHV activity in Imperial County. However, in general, the comments are conclusory and not supported by data, detailed information, or other evidence that

would be required for an adequate BACM demonstration under our guidance. ¹²³ As summarized in the guidance:

In summary, the State must document its selection of BACM by showing what control measures applicable to each source category (not shown to be de minimis) were considered. The control measures selected should preferably be measures that will prevent PM–10 emissions rather than temporarily reduce them. The documentation should compare the control efficiency of technologically-feasible measures, their energy and environmental impacts and the costs of implementation. 124

Furthermore, contradictions in the comments also serve to illustrate that there are fundamental factual questions that need to be addressed about the amount of OHV activity during different seasons and different times of the day, and the best ways to mitigate emissions from such activities. At this juncture, ICAPCD has not conducted an adequate analysis.

OHV #5: Many commenters (e.g., 0108 and OWD) state that further OHV restrictions would hurt the already depressed local economy, and cite potential effects on local business owners, farmers, land owners, OHV users, race car owners, construction companies, ranchers, the Imperial Irrigation District and others. Commenters observe that recreational activities generate substantial revenue (0196), and one (0156.1) claims that OHVs have contributed several hundred million dollars to the local economy. ICAPCD believes that the economic cost of OHV activity restrictions is far more than appropriate for BACM. For example, ICAPCD estimates that closing the Imperial Sand Dunes Recreational Area would cost \$370,000 to \$640,000 per ton of PM₁₀ reductions. ICAPCD provides specific references to support its cost/benefit analysis. Another commenter (0219) similarly believes that additional OHV restrictions, such as closing land in the summer, would provide few benefits given the relatively small emissions from OHVs, but would have significant economic impacts.

Response: We appreciate the value of OHV tourism to the local economy, and agree that ICAPCD must consider economic feasibility in BACM analyses evaluating potential controls for emissions from OHV activities. However, the relevant inquiry in the economic feasibility analysis required in BACM determinations is "the cost of reducing emissions from a particular source category and costs incurred by

¹²¹ ICAPCD Rule 804, sections B, C.29, E and F. ¹²² See also "Fugitive Dust Control Plan." Bureau

¹²² See also "Fugitive Dust Control Plan," Bureau of Land Management El Centro Field Office, June 29, 2006; "Fugitive Dust Control Plan," Bureau of Land Management El Centro Field Office, January 25, 2010 Draft; e-mail from Andrew Trouette (BLM) to Andrew Steckel (EPA), May 24, 2010.

¹²³ General Preamble Addendum at 42010–42014.

¹²⁴ Id. at 42014.

similar sources that have implemented emission reductions." ¹²⁵ In this case, the cost of OHV restrictions on OHV area owners (*i.e.*, the State and Federal governments) and users would appear to be minimal, and the secondary economic impacts on businesses supporting OHV tourism are not relevant to the required BACM analysis. In any event, ICAPCD needs to evaluate the economic feasibility of potential controls, including those adopted in other areas, in determining what controls constitute BACM in this area.

OHV #6: EcoLogic asks EPA to clarify whether and where OHV restrictions are being contemplated in the Imperial Sand Dunes Recreation Area and elsewhere and to what extent OHV activity on Federal land is subject to the proposed rule or ICAPCD jurisdiction. EcoLogic and another commenter (0141) also request clarification on which of the 250 square miles of OHV areas EPA is asking ICAPCD to evaluate for closure and what the basis is for claiming that these areas are likely to impact populations.

Response: State and Federal agencies are subject to many local requirements including Regulation VIII and other air quality related ICAPCD rules. 126 Our proposal explains why ICAPCD must analyze whether additional controls (potentially including closure) are appropriate for public land in Imperial County open to OHVs, which ICAPCD estimates at over 250 square miles. 127 We did not identify any specific geographic areas needing more or less analysis or control or having more or less impact on populations. Rather, in the analysis ICAPCD should consider all potential available OHV controls in all OHV areas in Imperial County and, where feasible, should consider whether different areas within the County have different impacts on populations or areas with exceedances of the NAAQS.

OHV #7: Several commenters believe additional OHV restrictions should be analyzed and/or incorporated into Regulation VIII. CBD believes that OHV requirements in Rule 804 are too vague to be enforceable as required by CAA section 110(a), particularly regarding BLM and State managed land. CBD believes Regulation VIII should require specific BACM measures, such as restrictions on the number of OHV vehicles operating each day, to improve emission quantification and control. CBD believes such carrying capacity caps or other restrictions should also address weather conditions when they

exacerbate PM₁₀ emissions, such as during windy weather and the summer. Comite comments that ICAPCD should analyze whether OHV permit requirements, such as those that are required in San Bernardino County, should be required in Imperial County. Comite also believes that ICAPCD should analyze controls described in the California State Parks Off-Highway Motor Vehicle Recreation Division's 2008 Soil Conservation Standard and Guidelines.¹²⁸ Lastly, instead of decreasing the size of OHV areas, one commenter (0120) suggested rotating OHV areas to help surface crust

Response: The commenters as a group make constructive suggestions that would be appropriate for consideration in a comprehensive evaluation of BACM for this source category. We believe ICAPCD should analyze all potential available OHV controls to meet the CAA's BACM requirement, including those mentioned in the comments and those adopted in other areas, pursuant to EPA guidance.¹²⁹

F. Definition of Disturbed Surface (DS)

DS #1: ICAPCD believes the term "disturbed surface" is self-evident and that no questions have been raised about it since rule adoption. ICAPCD believes Rule 804 is clear that an area is deemed disturbed if it shows any sign of manmade disturbance (e.g., vehicle traffic) and the owner/operator cannot prove that the area meets the characteristics of a stabilized surface. ICAPCD is willing to define this term more clearly during the next revision to Rule 101, but strongly objects to EPA disapproving Regulation VIII on this basis. In contrast, CBD supports EPA's concerns regarding this definition in Regulation VIII, and further believes the definition should be tailored to Imperial Valley and explicitly include open areas on BLM land that emit significant PM₁₀ including the Algodones Dunes. In this regard, CBD suggests specific edits to SJVUAPCD's analogous rule.

Response: We believe the explanation provided in ICAPCD's comment is a logical interpretation of the undefined term in its regulation. However, we also believe that alternate definitions are possible (such as that recommended by CBD in its comment), and it is common practice to define all terms used in rules that are needed in order to ensure clarity and enforceability. We encourage ICAPCD to clarify its regulation by

including an appropriate definition of this critical term and to consider CBD's recommendations for the wording of the rule.

G. Unpaved Road (UR) Controls

UR #1: ICAPCD projects that control of unpaved non-farm roads provides 55% of Regulation VIII's emission reductions. ICAPCD believes this demonstrates a good faith effort to reduce PM₁₀ emissions from road stabilization, and asserts that the County is trying to increase funding for such projects. ICAPCD states that the \$2 million/year available to the County Department of Public Works (PWD) for road maintenance and stabilization reflects great needs and low availability of public funds in the County. According to ICAPCD, this budget is for maintenance of 1,350 miles of paved roads which require resurfacing every 10-15 years, or 90 miles of extensive maintenance each year. Thus, ICAPCD argues that allocation of 9% of this budget to stabilize 19 miles of unpaved road represents, contrary to EPA's assertion, the most expedited schedule possible with the present level of available funding.

Response: Where economic feasibility of control depends on public funding, EPA will consider past funding and the future availability of funding sources to determine if a good faith effort is being made to implement BACM expeditiously. 130 The fact that unpaved road controls provide 55% of Regulation VIII's estimated emission reductions is not in itself sufficient to demonstrate good faith efforts to control road dust expeditiously. Alternatively, for example, this high percentage of the total amount of reductions could occur if other sources are under-controlled or are less feasible to control. Nonetheless, EPA believes that some of the information ICAPCD provides in its comment on this point could help to demonstrate a good faith effort to control road dust expeditiously. Given ICAPCD and Imperial County's limited resources, we do not believe this analysis needs to be exhaustive, but it should be more thorough and documented than presented in the Regulation VIII submittal and this comment. For example, ICAPCD indicates in this comment that the County is trying to increase funding for road stabilization but provides no documentation to help establish this point. Nor has ICAPCD explained how the road stabilization budget was derived in light of various Federal,

¹²⁵ General Preamble Addendum at 42013.

¹²⁶ See CAA section 116.

¹²⁷ See, e.g., proposal TSD, pp. 8 and 13-15.

 $^{^{128}\,\}mathrm{Submitted}$ as Exhibit D to Comite comment etter.

 $^{^{129}}$ See, e.g., General Preamble Addendum at 42012–42013.

 $^{^{130}\}operatorname{Proposal}$ TSD, p. 16, and General Preamble Addendum at 42013.

State, and local (including local Measure D) funding sources for public works construction and maintenance, or otherwise provided the demonstration contemplated by the relevant EPA guidance.¹³¹

UR #2: ICAPCD disagrees with EPA that there could be problems enforcing Rule 805 section E.7. As evidence, ICAPCD explains that Imperial County PWD is meeting its commitment to implement its submitted plan, which includes stabilizing different unpaved roads each year and maintaining all stabilized roads as intended by the rule.

Response: CAA section 110(a) requires that control measures be enforceable. While Rule 805 section E.7 requires that a compliance plan be submitted to ICAPCD, the rule is not clear about the specific requirements of the plan (i.e., that the County must stabilize different roads each year and must maintain all stabilized roads) and does not contain a mandate that the terms of the plan be carried out. Evidence that Imperial County PWD is in fact currently implementing the plan is not sufficient to ensure enforceability as required by the CAA.132 ICAPCD should revise the rule to clarify this section consistent with enforceability requirements of CAA section 110(a).

UR #3: Comite believes that ICAPCD should incorporate additional restrictions into Regulation VIII, including property line visible emissions (VE) limits such as those adopted by Maricopa County and SCAQMD, dust controls for unpaved roads subject to Rule 805 section E.7, and other more stringent requirements adopted by SCAQMD, SJVUAPCD, Maricopa County and Clark County.

Response: ICAPCD's analysis of BACM did consider controls implemented in other areas, including those adopted by SCAQMD, SJVUACPD, and Maricopa and Clark Counties. Our proposal TSD recommends several specific controls from these areas for further consideration by ICAPCD, including imposition of a fence-line opacity standard.¹³³

However, with the exception of the deficiencies identified in our proposal, we believe that ICAPCD sufficiently analyzed controls in other areas for potential BACM.¹³⁴ For example, ICAPCD explains that SCAQMD has only a 0% fence-line opacity standard, whereas ICAPCD and other agencies with adopted rules approved as BACM

all have a similar general 20% opacity standard applicable everywhere, and not just at the fence-line. ¹³⁵ ICAPCD claims that SCAQMD's 0% fence-line standard is less stringent than a general 20% standard. While it is difficult to compare the two standards, ¹³⁶ we do not have evidence that SCAQMD's standard is more stringent than the general standard used by ICAPCD and by other air districts.

UR #4: One commenter (0154) states that it is not feasible or cost effective to eliminate all dust from dirt roads.

Response: We agree with this comment. Neither Regulation VIII nor our proposal or this final action assumes that dust emissions can be completely eliminated from farm and non-farm dirt roads.

H. Border Patrol (BP) Controls

BP #1: ICAPCD comments that Rule 800 section F.6.c does not explicitly exempt BP from fugitive dust controls, but requires BP to control dust from roads it owns/operates consistent with Rule 805 except where inconsistent with BP's authority or mission. ICAPCD indicates that, while BP does not own any roads, it uses public roads to accomplish its mission, and some roads adjacent to the border are used exclusively by BP. ICAPCD states that most of these roads are below Rule 805's applicability threshold, are located in remote areas that are for the most part restricted to BP vehicles, and PM₁₀ controls are not feasible and are inconsistent with BP's mission. ICAPCD explains that although BP neither owns nor operates these roads, BP is committed to implement PM₁₀ controls such as vehicle speed restrictions and access controls. ICAPCD indicates that since adoption of Regulation VIII, BP has submitted two productive DCPs. Therefore, ICAPCD disagrees with EPA's recommendation to remove or narrow the exemption for BP activities, and proposes to continue addressing BP through a DCP requirement to insure that BP continues controlling fugitive dust.

Response: First, we note that nothing in our proposal affects Regulation VIII's requirement for BP to develop and implement DCPs pursuant to Rule 800 sections F.6.a and F.6.b. However, ICAPCD's explanation is unclear as to whether or not BP operates any roads

subject to the rule. If ICAPCD can support its assertion that BP neither owns nor operates such roads, the exemption in Rule 800 section F.6.c. is simply unnecessary and should be removed. If BP does own or operate such roads, we continue to believe that the exemption is unnecessarily broad and should be removed or narrowed and demonstrated to be consistent with BACM requirements.

ICAPCD offers no evidence or explanation to support its contention that Rule 805 requirements are potentially inconsistent with BP's authority and/or mission. We also note that BP has not raised concerns with our proposal, although we informed BP of it before publication. EPA appreciates BP's efforts to limit PM_{10} pollution through DCPs. Our concern, however, is with ICAPCD's Regulation VIII submittal and the lack of clarity in, and analysis to support, the actual provisions in Regulation VIII intended to govern these activities.

BP #2: OWD comments that BP frequently goes off-road within Ocotillo Wells SVRA, beyond OWD's control.

Response: Rule 804 section E imposes requirements on owners of open areas such as Ocotillo Wells SVRA regardless of who owns vehicles driving on the open areas. Nothing in our proposal would affect these existing ICAPCD requirements.

I. Unpaved Farm Roads and Traffic Areas (UFRTA) Controls Introduction

The comments summarized in this section and sections II.J and K relate to ICAPCD Rule 806, Conservation Management Practices. In discussing our proposal regarding Rule 806, a number of these comments address various aspects of analogous rules adopted by State and local agencies in California and Arizona for controlling PM₁₀ from agricultural sources. All of these rules are menu-based and as such divide the control measures, known as conservation management practices (CMPs) or best management practices (BMP), into three or more menus known as "categories." We provide the following information on these rules as an introduction to inform our responses to the comments in this section and sections II.J and K.

ICAPCD Rule 806, Conservation Management Practices, is a menu-based rule that has four categories:

- Land preparation and cultivation.
- Harvesting.
- Unpaved roads.
- Unpaved traffic areas.

All persons who own or operate an agricultural operation site of forty acres or more are required to implement one

 $^{^{131}\,\}mathrm{See}$ proposal TSD, p. 16.

 $^{^{132}\,{}m See}\:id.,\,{
m p.}$ 9.

 $^{^{133}}$ *Id.*, p. 11.

 $^{^{134}\,2005}$ BACM analysis, chapter 4, and 2009 PM_{10} SIP, table 4.2.

 $^{^{\}rm 135}\,2005$ BACM analysis, p. 21.

¹³⁶ For example, a 40% opacity plume in the middle of a large property that disperses to 0% opacity by the property fence-line violates ICAPCD's rule but not SCAQMD's. Conversely, a 10% opacity plume that disperses to 5% opacity by the fence-line violates SCAQMD's rule but not ICAPCD's

CMP from each of these categories. Table 3 summarizes the relevant categories from Rule 806 and the other menu based rules to which we refer:

TABLE 3

State or local agency	Rule	Area	Categories for on-field agricultural operations	Categories for unpaved Ag. roads and traffic areas
Imperial County APCD (ICAPCD)	806	Imperial County	 Land Preparation and Cultivation (including tillage). 	■ Unpaved Roads.
San Joaquin Valley Unified APCD (SJVUAPCD).	4550	San Joaquin Valley Plan- ning Area. ¹³⁷	Harvesting Land Preparation and Cultivation (including tillage).	■ Unpaved Traffic Areas. ■ Unpaved Roads.
			■ Harvest Cropland—Other.	■ Unpaved Traffic Areas.
Arizona Department of Environ- mental Quality (ADEQ).	Arizona Administrative Code (A.A.C) R18–2– 610 and R18–2–611.	Phoenix Planning Area. ¹³⁸	■ Tillage and Harvest	■ Noncropland.
			■ Cropland.	
Great Basin Unified APCD (GBUAPCD).	502	Alpine, Inyo, and Mono Counties. 139	■ Land preparation	■ Unpaved Roads.
,			■ Harvest Other Cultural Practices.	■ Unpaved Traffic Areas.
South Coast AQMD	Rule 403 And Agricul- tural Handbook.	South Coast Air Basin. ¹⁴⁰	 Active Conservation Practices. Inactive Conservation Practices. 	■ Unpaved Roads.
South Coast AQMD	Rule 403 And Coachella Valley Agricultural Handbook.	Coachella Valley Plan- ning Area.	■ Active Conservation Practices.	■ Unpaved Roads.
			■ Inactive Conservation Practices.	

We also refer below to SJVUAPCD's Rule 8081, Agricultural Sources, which has opacity and stabilization requirements for high traffic agricultural unpaved roads and traffic areas.

UFRTA #1: Comite believes that California has not demonstrated why agricultural paved and unpaved roads should be subject to less stringent requirements than other roads in Imperial County (i.e., those subject to Rule 803 regarding track-out/carry-out and Rule 805) and cites San Joaquin Valley where such roads must meet CMPs as well as general requirements.

In contrast, ICAPCD and the Farm Bureau believe Regulation VIII is more stringent regarding unpaved farm roads and traffic areas than analogous rules in other areas even though Imperial County farm roads and traffic areas are not subject to opacity limits. These latter commenters note that Rule 806 requires CMPs for all unpaved roads and traffic areas regardless of vehicle trips per day (VTD), unlike SJVUAPCD Rule 4550. COLAB also explains that ICAPCD Rule 806 was designed to address all unpaved roads by applying to parcels greater than 40 acres (97% of farmland in Imperial County) compared to SJVUAPCD's Rule 4550 which addresses roads on parcels larger than 100 acres (91% of farmland in the San Joaquin Valley). Lastly, ICAPCD and the Farm Bureau assert that most private unpaved farm roads are less used and are therefore below Rule 805's 50 VTD threshold. Regardless of VTD, however, these latter commenters argue that owners of these roads must implement Rule 806 CMPs.

Response: EPA's proposal noted that ICAPCD has not demonstrated BACM for unpaved farm roads and traffic areas because of the exemption in Rule 805 section D.2 from opacity and stabilization requirements applicable to

non-agricultural operation sites. EPA further noted that SJVUAPCD does not provide such an exemption, and ICAPCD had not justified such an exemption.¹⁴¹

ICAPCD and other commenters do not offer evidence that Regulation VIII is as stringent as comparable controls in this regard, but instead claim that Regulation VIII is more stringent in other respects. For example, no commenter disputes our conclusion that an unpaved farm road with 75 VTD would be subject to opacity standards in SJVUAPCD's Rule 8081 but not in ICAPCD's Regulation VIII. However, ICAPCD and others argue that the applicability threshold for unpaved farm roads subject to Rule 806, for example, is more stringent than SJVUAPCD's analogous requirements. Because opacity and surface stabilization requirements on heavilyused farm roads and traffic areas are being implemented in other areas, we believe that, absent an adequate explanation, these requirements are at least presumptively BACM for this source category in Imperial County. Accordingly, these controls should be evaluated as potential BACM by ICAPCD. However, as stated previously, ICAPCD may consider conditions

¹³⁷ SJVUAPCD's jurisdiction includes the entire counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, and Kings and part of Kern County. SJVUAPCD does not include the parts of East Kern that are not in the San Joaquin Valley Air Basin. See 40 CFR 81.305.

¹³⁸ The Phoenix Planning Area includes Maricopa County and a portion of Pinal County. See 40 CFR 81 303

 $^{^{139}}$ See section 1 and 2 of GBUAPCD Rule 502. Also see 40 CFR 81.305.

¹⁴⁰ SCAQMD's jurisdiction includes the South Coast Air Basin and the Coachella Valley Planning Area. For a description of the boundaries of the Los Angeles-South Coast Air Basin Area and the Coachella Valley Planning Area, see 40 CFR 81.305. The South Coast Air Basin includes all of Orange County and the more populated portions of Los Angeles, San Bernardino, and Riverside Counties. The Coachella Valley Planning Area includes central Riverside County in the Salton Sea Basin.

¹⁴¹ Proposal TSD, pp. 8–9.

specific to Imperial County in a revised BACM evaluation for unpaved roads and traffic areas, as appropriate.

We also agree with Comite that it is not clear why Rule 803 section D.1 exempts farm roads and traffic areas from certain carry-out and track-out requirements that apply to similar nonfarm roads. We encourage ICAPCD to consider removing this exemption, although such a rule modification is not mandated by the CAA at this time because carry-out/track-out has not been identified as a significant source category subject to the BACM requirement.

UFRTA #2: Comite believes that Rule 806's CMPs are not sufficiently specific regarding agricultural unpaved roads and traffic areas. In contrast, ICAPCD comments that Rule 806 section F.6 requires CMP plans to include other relevant information, which gives ICAPCD authority to require adequate specificity. COLAB also comments that the CMP forms provided in the rule are examples and if the relevant information was provided the form could be changed.

Response: Issues raised regarding specificity of CMPs for unpaved roads and traffic areas are similar to issues raised regarding the specificity of CMPs for other agricultural operations. See response to comment AL #3 below.

J. Agricultural Land Controls (AL)

See Introduction in section II.I above. AL #1: ICAPCD comments that Rule 806's CMP requirements are similar to requirements adopted by SJVUAPCD, Maricopa County 142 and SCAQMD, 143 and are directly based on SJVUAPCD requirements that EPA approved as BACM in 2004, citing 69 FR 30035.144 ICAPCD asserts that the individual CMPs in Rule 806 are similar to those found in SJVUAPCD Rule 4550 and GBUAPCD Rule 502 and concludes that the only differences in the rules are due to differences in local agricultural practices. The Farm Bureau also states that there is little difference between GBUAPCD and ICAPCD control measures.

Response: We agree that many individual CMPs and requirements in the rules outlined in Table 3 are similar. However, this overall similarity does not affect the two specific BACM deficiencies in ICAPCD Rule 806 for tilling and harvesting emissions identified in our proposed action. 145 One of these deficiencies concerns the lack of sufficiently defined requirements in contrast to the application submittal and review processes in the SJVUAPCD and GBUABCD rules that insure more effective implementation and enforcement of the requirements.¹⁴⁶ The other deficiency is related to the number of CMPs required by Rule 806. Rule 806 section E requires one CMP from the

"land preparation and cultivation" category and one CMP from the "harvesting" category, while SJVAPCD Rule 4550 requires an additional CMP from the "cropland-other" category. GBUAPCD Rule 502 also requires that one CMP each be selected from the "land preparation and cultivation," "harvest," and the "other cultural practices" categories. 147

AL #2: ICAPCD believes that EPA disregards that Imperial County crops are irrigated, and that continued irrigation and conditioning of soil dramatically reduce its potential for both entrained and windblown emissions. ICAPCD believes this fact must be considered when comparing Rule 806 to rules in other areas.

Response: As stated previously above, EPA agrees that it is appropriate to consider conditions specific to an area when evaluating potential BACM.¹⁴⁸ However, most of the harvested cropland in other areas subject to comparable requirements is also irrigated. The following table shows data from the 2007 Census of Agriculture 149 for the total acres of harvested cropland and the acres of irrigated harvested cropland in relevant counties in California and Arizona. Imperial County and the counties in the SJVUAPCD 150 are included. Riverside County in California 151 and Maricopa County in Arizona are also included.

TABLE 4

County, State	Total harvested cropland (acres)	Irrigated harvested cropland (acres)
Imperial, CA	375,904	375,167
Maricopa, AZ	190,182	189,141
Riverside County, CA	163,783	158,437
San Joaquin County, CA	444,670	426,670
Stanislaus, CA	307,992	297,053
Merced, CA	466,304	458,017
Madera, CA	264,767	260,596
Fresno, CA	978,948	960,215

¹⁴² Although ICAPCD refers to requirements adopted by Maricopa County in its comments, Arizona's rules, A.A.C. R18–2–610 and R18–2–611, for controlling PM–10 from agricultural sources apply to some sources beyond the boundaries of Maricopa County.

42012.

¹⁴³ As noted in Table 3 above, SCAQMD's Rule 403 has requirements for agricultural activities that apply to both the South Coast Air Basin and Coachella Valley Planning Area.

¹⁴⁴ EPA approved SJVUAPCD Rule 4550 in 2006, not in 2004. See 71 FR 7683. EPA approved a commitment for the San Joaquin Valley CMP Program in 2004. See 69 FR 30006.

¹⁴⁵ See 75 FR 8008, 8011–8012.

¹⁴⁶ See SJVUAPCD Rule 4550 section 6.3 and 6.4 and GBUAPCD Rule 502 section 6.3 and 6.4.

¹⁴⁷ See SJVUAPCD Rule 4550 section 6.2 and SJVUAPCD "List of Conservation Management Practices." See also GBUAPCD Rule 502 section 6.2

and, for example, GBUAPCD Supplemental Application Form for Alfalfa. See also "Conservation Management Practices for Farms in Inyo, Mono and Alpine Counties, Program Description and Plan Application Forms," December 19, 2008, Great Basin Unified Air Pollution Control District, at http://www.gbuapcd.org/farm/

CMPprogramdescriptionandforms.pdf.

148 General Preamble Addendum at 42010 and

^{149 2007} Census of Agriculture, California, State and County Data, and 2007 Census of Agriculture, Arizona, State and County Data, United States Department of Agriculture, National Agricultural Statistics Service. See http://www.agcensus.usda.gov/Publications/2007/Full Report/Volume_1, Chapter_2_County_Level/California/cav1.pdf and http://www.agcensus.usda.gov/Publications/2007/

Full_Report/Volume_1,_Chapter_2_County_Level/ Arizona/azv1.pdf.

 $^{^{150}}$ See footnote 141 above. The census data in Table 4 are for all of Kern County.

¹⁵¹ Of all the counties included in SCAQMD, Riverside County has the largest acreage of harvested cropland. According to the 2007 Census of Agriculture, Orange County has 7,846 acres of harvested cropland, Los Angeles County has 25,829 acres of harvested cropland, San Bernardino County has 27,516 acres of harvested cropland, and Riverside County has 163,783 acres of harvested cropland. 2007 Census of Agriculture, California, State and County Data, United States Department of Agriculture, National Agricultural Statistics Service. See http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_2_County_Level/California/cav1.pdf.

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County, State	Total harvested cropland (acres)	Irrigated harvested cropland (acres)
Kings, CA	419,964 560,320 764,929	419,080 540,887 756,645

Thus, the mere fact that crops are grown using irrigation in Imperial County does not in and of itself justify different standards for BACM.

AL #3: ICAPCD comments that Rule 806 section F.6 specifies that the CMP plan shall include "other relevant information as determined by the ICAPCD," which gives ICAPCD authority to modify the CMP plans to specify frequency of CMP applicability. Therefore ICAPCD believes a mechanism is in place in the rule for modification of CMPs to provide such details, and therefore this should not be a basis for disapproval of Regulation VIII as BACM. ICAPCD notes its commitment to modify the CMP plans to provide such details.

Response: As noted by ICAPCD, Rule 806 section F.6 provides a mechanism that could be used by ICAPCD to provide greater specificity. However there is no required process in the rule for sources to provide such information to ICAPCD or for ICAPCD to review the CMPs and/or to require revision of the CMPs that sources have chosen to implement. Under section F, sources are only required to prepare a plan containing minimal information and to maintain a copy of the plan. Thus the CMPs would continue to be broadly defined unless or until ICAPCD proactively determines that greater specificity is needed. Absent such vital details, it would be difficult for regulated entities to know precisely what is required of them to comply with a BACM level of control, and it would be difficult for ICAPCD, EPA, or others to enforce these requirements.¹⁵² In

contrast, SJVUAPCD Rule 4550 section 5 requires sources to prepare and submit a CMP application to the District for approval and section 6 requires the District to evaluate and either approve or disapprove the application in writing. GBUAPCD Rule 502 sections 5 and 6 contain substantially identical requirements. Such requirements provide a mandatory process that is far more likely to ensure that the CMPs are implemented and enforceable at a BACM level of control than the provision in ICAPCD Rule 806.

Finally, even if ICAPCD were to routinely exercise its discretionary authority in Rule 806 to specify the frequency of CMP applicability, the deficiency noted in our proposed action related to lack of CMP specificity extends beyond the issue of frequency.¹⁵³

AL #4: ICAPCD claims that BACM should not be required for harvest activities because the emissions from these activities (0.01 tpd) are negligible. ICAPCD argues that efforts to increase regulation of emissions from harvesting would waste resources. In addition, ICAPCD claims that the CMPs in Rule 806 related to harvesting are similar to those in SJVUAPCD Rule 4550.

Response: ICAPCD has identified tilling emissions as a significant source. ¹⁵⁴ As stated in our proposal for this action, measures in Rule 806 for harvesting must also meet BACM because the activities occur at the same facilities and are integrally related to tilling emissions. ¹⁵⁵ By analogy, where enforceable volatile organic compound (VOC) reasonably available control technology (RACT) level controls are required for refineries, SIP rules generally impose leak detection and repair requirements on valves, flanges, threaded connections and other related

We agree that individual CMPs for emissions from harvesting activities in Rule 806 are generally similar to CMPs for such emissions in the San Joaquin Valley. However, both SJVUAPCD and GBUAPCD require one more CMP for on-field agricultural sources than does Rule 806.¹⁵⁷ This additional CMP may reduce emissions from harvesting activities. ICAPCD must establish that requiring fewer controls for on-field agricultural activities is consistent with BACM requirements. Thus far ICAPCD has not provided a convincing justification.

AL #5: ICAPCD disagrees with our identification of the requirements of Rule 806 for tilling as a deficiency in the BACM analysis. In support of its position, ICAPCD asserts that San Joaquin Valley sources may select two CMPs that reduce emissions from tilling from the list of measures, but they are not required to do so. ICAPCD also claims that because per-acre emissions from land preparation are about four times as high in the San Joaquin Valley as they are in Imperial County, the costeffectiveness of emission reductions from tilling activities through the implementation of any CMP should be four times as high in Imperial County as in the San Joaquin Valley. For these two reasons, ICAPCD believes that Rule 806 requirements for tilling are as stringent as analogous SJVUAPCD requirements. In contrast, Comite comments that Arizona Rules 18–2–610 and 611 require at least two CMPs from each

¹⁵² For instance, one of the CMPs that is both in the "land preparation and cultivation" category in Rule 806 section E.1 and the "harvesting" category in section E.2 is "equipment changes/technological improvements" which is defined in section C.15 as "To modify the equipment such as tilling; increase equipment size; modify land planning and land leveling; match the equipment to row spacing; granting to new varieties or other technological improvements. It reduces the number of passes during an operation, thereby reducing soil disturbance." This definition is too broad to ensure enforceability. Moreover, because there is no mechanism to narrow the definition for a particular agricultural operation, a CMP may be implemented in a manner less stringent than a BACM level of control. In a similarly broad fashion, Rule 806 section C.34 defines "speed limits," a CMP in both

equipment even if emissions from any one of these taken individually might be much smaller than the major source threshold requiring RACT.¹⁵⁶

the "unpaved roads" category in section E.3 and the "unpaved traffic areas" category in section E.4, as "enforcement of speeds that reduce visible dust emissions. The dust emissions from unpaved roads are a function of speed, meaning reducing speed reduces dust." However, an appropriate speed limit or range of speed limits is not specified or otherwise insured.

¹⁵³ See 75 FR 8008, 8011–8012.

¹⁵⁴ Proposal TSD, pp. 5–6.

¹⁵⁵ Proposal TSD, p. 10, footnote 25.

¹⁵⁶ SJVUAPCD Rule 4451, Valves, Pressure Relief Valves, Flanges, Threaded Connections and Process Drains at Petroleum Refineries and Chemical Plants, amended April 20, 2005.

¹⁵⁷ See SJVUAPCD Rule 4550 section 6.2 and SJVUAPCD "List of Conservation Management Practices." See also GBUAPCD Rule 502 section 6.2 and, for example, GBUAPCD Supplemental Application Form for Alfalfa. See also "Conservation Management Practices for Farms in Inyo, Mono and Alpine Counties, Program Description and Plan Application Forms," December 19, 2008, Great Basin Unified Air Pollution Control District, at http://www.gbuapcd.org/farm/CMPprogramdescriptionandforms.pdf.

category in the rule whereas Rule 806 requires only one, and that SJVUAPCD

requires up to three CMPs.

Response: Although ICAPCD focuses here on emissions from tillage, the deficiency in our proposed rule is related to requirements in Rule 806 for sources to implement one fewer CMP overall for on-field agricultural sources than is required by SJVUAPCD Rule 4550 and GBUAPCD Rule 502. Thus the fact that sources subject to SJVUAPCD Rule 4550 are not required to select two CMPs for reducing emissions from tillage is irrelevant. ICAPCD needs to assess whether additional CMPs for onfield agricultural sources are BACM for Imperial County.

ICAPCD has not established that the agricultural activities in Imperial County are significantly different from those in other areas. Accordingly, EPA believes that ICAPCD should have BACM level controls for both tillage and harvest emissions as do other areas with programs for emissions from agricultural activities, and should consider SJVUAPCD and controls from other areas with analogous rules when assessing whether a requirement for additional CMPs would be economically and technologically feasible to control emissions from these activities. ICAPCD claims that implementing tillage CMPs may be more cost-effective in the San Joaquin Valley, but does not address whether it would be economically feasible to require additional CMPs in Imperial County.

We agree with Comite that sources subject to Arizona Rules 18–2–610 and 611 are required to implement two practices each from the "tillage and harvest" and "cropland" categories. ICAPCD needs to consider whether requiring four practices for on-field agricultural sources constitute BACM

for Imperial County.

AL #6: Comite claims that Maricopa's inspection regime for agricultural sources is more rigorous than ICAPCD's.

Response: Comite provides no supporting information on either the Maricopa County or ICAPCD inspection program on which to base a response and we are not otherwise aware of information that supports this comment.

information that supports this comment. *AL #7:* The Farm Bureau agrees that SJVUAPCD requires an additional CMP from the "cropland-other" category but notes that the same requirement is found in ICAPCD's "land preparation and cultivation" and "harvest activities" categories. As a result, the Farm Bureau believes that including an additional category would be redundant and onerous for participants.

Response: The deficiency identified in our proposed action is related to the

requirement in Rule 806 for Imperial County sources to implement one fewer practice for on-field agricultural sources overall without a sufficient justification. 158 ICAPCD does not necessarily need to add a category to Rule 806 in order to address this deficiency. For example, depending on what is most appropriate for conditions in Imperial County, ICAPCD may be able to require that more than one CMP be implemented from the categories that currently exist in Rule 806. Moreover, it would not be redundant to require Imperial County sources to implement an additional CMP for on-field agricultural sources. Rule 806 has two categories for on-field agricultural sources, "land preparation and cultivation" and "harvesting," and requires sources to implement one practice from each category. As noted in Table 3 above, SJVUAPCD Rule 4550 and GBUAPCD Rule 502 have three categories for on-field agricultural sources, and require that sources implement one practice from each of these categories. Moreover, as noted in our response to comment AL #5 above, sources subject to Arizona Rules 18-2-610 and 611 are required to implement four practices for on-field agricultural sources. As part of a BACM analysis, ICAPCD should consider the economic and technological feasibility of requiring additional CMPs for on-field agricultural sources, including consideration of the requirements in rules adopted by SJVUAPCD, GBUAPCD and Arizona.

K. Agricultural Land Windblown Dust Controls (ALWD)

See Introduction in section II.I above. ALWD #1: COLAB comments that the deficiencies identified by EPA related to windblown dust are particularly troublesome because they are so surprising. COLAB believes that Rule 806 exceeds CAA needs because windblown dust from agriculture is insignificant. Comite, on the other hand, notes SCAQMD's requirements for reducing windblown dust from active and inactive agricultural fields as BACM measures that ICAPCD should consider along with recommendations in U.S. Department of Agriculture's (USDA) National Agronomy Manual for reducing such dust.

Response: EPA has determined that windblown dust from agriculture is a significant PM₁₀ source category in Imperial County for which ICAPCD must demonstrate, but has not yet demonstrated, implementation of BACM

ÅLWD #2: ICAPCD believes that EPA should have concurred with exceptional event requests associated with high winds as discussed in the exceptional event comments above. As a result, ICAPCD believes that windblown dust from agricultural lands is not a significant source category in SIP development, and therefore not subject to BACM.

Response: In our proposed action on Regulation VIII, we explained how we determined that windblown dust from agricultural lands is a significant source category subject to BACM. 160 We have not received information in the comments or elsewhere that affects this conclusion or the related 2009 EE decision. See also responses to exceptional event comments above and comment OHV #1.

ALWD #3: ICAPCD disagrees that Rule 806 does not apply to fallow agricultural fields. ICAPCD states that there are no exemptions in Rule 806 for fallow fields and fallowing is an optional CMP to control emissions from "land preparation and cultivation" under Rule 806 section E.1.

Response: Fallowing land is defined in Rule 806 section C.16 as "Temporary or permanent removal from production. Eliminates entire operation/passes or reduces activities." We note that the fallowing CMP is an option under both the "land preparation and cultivation" category in section E.1 and the "harvesting" category in section E.2. While the fallowing CMP in Rule 806 section E.1 may reduce emissions from "land preparation and cultivation" and from "harvesting," it does not address any windblown dust emissions that may occur once a field is removed from production. EPA believes that the evaluation of BACM level controls for windblown dust from fallow fields should include consideration of USDAapproved conservation systems and activities.161

ALWD #4: ICAPCD comments that ICAPCD farms are all irrigated and historically well watered, which leads to stable clods and/or aggregates that lower susceptibility to wind erosion

level controls. ¹⁵⁹ ICAPCD should include in its BACM analysis consideration of whether existing SCAQMD controls, among others, and USDA recommendations for controlling wind erosion, are economically and technologically feasible measures to reduce windblown dust from active and fallow agricultural fields. Also see response to comment General #3 above.

¹⁵⁹ Proposal TSD, pp. 10-11.

¹⁶⁰ *Id.*, pp. 5–7.

¹⁶¹ *Id.*, pp. 10–11 and 17.

consistent with USDA's National Agronomy Manual. ICAPCD estimates that long-term irrigation reduces PM_{10} emissions by 25–45% from the predominant cultivated soil types in Imperial County, so local fallow and active agricultural land is controlled for windblown emissions relative to land not previously used for irrigated agriculture. In contrast, ICAPCD believes that SCAQMD's farm acreage is overwhelmingly devoted to dryland grain farming, and EPA has not shown that SCAQMD controls are appropriate for ICAPCD's irrigated fields.

Response: Based on data in Table 4, EPA believes that the majority of ICAPCD harvested acreage is irrigated. However, EPA disagrees that farm acreage subject to SCAQMD controls is overwhelmingly devoted to dryland farming. See total harvested cropland acres and irrigated harvested cropland acres for Riverside County in Table 4. While historic irrigation may provide for some level of control, windblown dust from agriculture is a significant source, and ICAPCD is required to implement BACM level controls for windblown emissions from active and fallow agricultural fields. ICAPCD has not provided a convincing justification for why controls in the Coachella Valley Planning Area are not applicable to Imperial sources. ICAPĈD's evaluation for BACM level controls for windblown dust from agricultural sources should include requirements in SCAQMD Rule 403 and the Coachella Valley Agricultural Handbook.

ALWD #5: ICAPCD notes that winds above 25 mph are extremely rare in the agricultural portion of Imperial Valley, and farmers usually avoid tilling on windy days to conserve soil. As a result, ICAPCD does not believe that SCAQMD's restriction for soil preparation and maintenance during days with winds above 25 mph would impact windblown dust emissions from agricultural fields in Imperial County. In contrast, Comite points to SCAQMD's requirements as potential BACM that ICAPCD has not properly considered.

ICAPCD has not properly considered. Response: ICAPCD must analyze and implement BACM for agricultural windblown dust emissions. 162 Such analysis may consider whether a restriction on tilling activities on days with winds above 25 mph is appropriate in Imperial County pursuant to our guidance. 163 However, ICAPCD has not provided such analysis in the Regulation VIII submittal, its comments or elsewhere. To the extent that farmers avoid tilling on windy days to conserve

soil anyway, this restriction would not seem to be onerous.

ALWD #6: ICAPCD comments that SCAQMD's only additional requirement for active fields besides the restriction on tilling on days with winds above 25 mph is to implement one more CMP from a list that includes minimum tillage. ICAPCD believes this CMP is not directly effective at reducing windblown emissions, and hence ICAPCD believes that by EPA's own reasoning, this requirement does not require windblown control on active fields in the South Coast Basin.

Response: ICAPCD has not explained why minimum tillage would not directly reduce windblown dust from active fields. EPA expects that minimum tillage would reduce windblown emissions by maintaining more plant residue on the field than conventional tillage. Establishing and maintaining land cover is one of the five principles noted in the National Agronomy Manual for wind erosion control.¹⁶⁴

ALWD #7: Comite believes that more specificity and information must be provided concerning IID's Fallowing Program to ensure that emission reductions from it are quantifiable, verifiable and enforceable.

Response: ICAPCD must analyze and implement BACM for agricultural windblown dust emissions. 165 If, as a result of this analysis, ICAPCD concludes that IID's Fallowing Program is needed to implement BACM, then we agree that ICAPCD needs to provide more information about IID's program and ensure that controls that are provided through the program are enforceable.

ALWD #8: Regarding EPA concerns with agricultural windblown dust controls, ICAPCD and the Farm Bureau note that Rule 806 was modeled after EPA-approved SJVUAPCD Rule 4550 at EPA's recommendation.

Response: EPA's guidance provides that BACM is determined on a case-by-case basis and can consider the specific conditions of the nonattainment area. 166 When we approved SJVUAPCD Rule 4550, we did not believe that SJVUAPCD had a regular and repeated windblown dust problem. 167 However, ICAPCD asserts in its 2009 PM 10 Plan that the "overwhelming majority of airborne PM in Imperial County is primary PM. The major source of

primary PM is fugitive windblown dust * *." 168 Moreover, ICAPCD's 2009 PM₁₀ Plan discusses how the flat terrain of Imperial Valley and strong temperature differentials produce moderate winds and how Imperial County occasionally experiences high winds with speeds greater than 30 mph in April and May. In addition, the 2009 PM₁₀ Plan attributes monitored exceedances in September and June to high winds. 169 As a result, EPA believes that ICAPCD must consider windblown dust controls for agricultural sources. Also, see responses to comments General #3 and EE #5.

ALWD #9: The Farm Bureau notes that both Rule 806 and the "Agricultural Air Quality Conservation Management Practices for Imperial Valley" were developed consistent with rules adopted in other areas and EPA recommendations. As a result, the Farm Bureau believes that this ensured Rule 806 was adequate.

Response: See response to comment General #3.

L. Other Controls (OC)

OC #1: Comite believes Regulation VIII should be further strengthened by removing director's discretion in Rule 802 section D.1, and removing the exemption in Rule 802 section D.4. ICAPCD objects to EPA's concerns regarding Rule 802 section D.1 because: (1) The APCO's discretion is limited to a determination of whether any of the controls in sections F.1 through F.3 can be implemented to satisfy the 20% opacity and stabilized surface requirements; (2) where a SIP-approved rule provides APCO discretion, the APCO can exercise the discretion without further SIP-approval; and (3) EPA has final enforcement authority for SIP-approved rules.

Response: EPA believes that the director's discretion provisions in Rule 802 are generally not acceptable under the CAA. Regarding ICAPCD's first argument, Rule 802 section D.1 provides the APCO discretion to waive completely the opacity and stabilized surface requirements without limiting discretion either by a procedure that the APCO must use (e.g., test method X) or by boundaries to the discretion (e.g., up to 30% opacity instead of 20% opacity). Thus, the discretion is not "limited."

Regarding ICAPCD's second argument, we note initially that EPA has a long history of rejecting such broad APCO discretion in SIP rules.¹⁷⁰

Continued

 $^{^{164}}$ See p. 502–17 of the USDA NRCS National Agronomy Manual, October 2002.

¹⁶⁵ Proposal TSD, pp. 5–7.

¹⁶⁶ See General Preamble Addendum at 42010 and 42012.

¹⁶⁷ See, e.g., 73 FR 14687, 14693 (March 19, 2008)

¹⁶⁸ 2009 PM₁₀ SIP, p. 1–1.

¹⁶⁹ 2009 PM₁₀ SIP, pp. 1–3 and 2–4.

¹⁷⁰ See, e.g., "Guidance Document for Correcting Common VOC and Other Rule Deficiencies," U.S.

¹⁶² Proposal TSD, pp. 5-7.

¹⁶³ General Preamble Addendum at 42013.

Moreover, we limit such discretion precisely because the APCO can exercise it without further SIP approval where a SIP-approved rule provides APCO discretion.

Regarding ICAPCD's third argument, while we can enforce SIP-approved rules, as stated, director's discretion provisions undermine their enforceability because enforcement of the rules are constrained by their terms. In this case, EPA or others could be restricted in enforcing against activity exempted by the APCO if this provision were SIP-approved.

While we share Comite's concerns with Rule 802 section D, our limited disapproval with respect to Rule 802 section D will not trigger sanctions or a FIP obligation because Rule 802 does not address a source category identified as significant and thus requiring BACM at this time. Therefore our limited disapproval will not trigger sanctions under CAA section 179 or a FIP obligation under section 110(c) with respect to bulk materials regulated by Rule 802. However, should regulation of bulk materials be subject to the BACM requirement in the future or to meet other SIP planning requirements under CAA title I, part D such as reasonable further progress or attainment, the APCO discretion in Rule 802 section D.1 or the exemptions in Rule 802 section D.4 could result in such consequences and/or affect the emission reduction credit for the rule.

M. Statutory and Executive Order Reviews (SEO)

SEO #1: OWD believes that EPA should address Executive Order 12898, which requires Federal agencies to identify and address disproportionately adverse health or environmental impacts on minority and low-income populations. Specifically, OWD believes that EPA's action may impact Imperial County's Hispanic and low-income population by reducing tourist income from OHV users. In contrast, Comite applauds the commitment of the Regional Administrator of EPA Region 9 to environmental justice principles, and notes that relatively large portions of the population in this area are not only Hispanic and poor, but are also suffering from poor health and this is exacerbated by air pollution problems in this area.

Response: EPA agrees it is important to consider environmental justice in our actions and we briefly addressed environmental justice principles in our

EPA Region IX, August 21, 2001 (the Little Bluebook); and "Issues Relating to VOC Regulation Cutpoints, Deficiencies, and Deviations," U.S. EPA, OAQPS, May 25, 1998 (The Bluebook).

proposal TSD.171 Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States. The Executive Order has informed the development and implementation of EPA's environmental justice program and policies. Consistent with the Executive Order and the associated Presidential Memorandum, the Agency's environmental justice policies promote environmental protection by focusing attention and Agency efforts on addressing the types of environmental harms and risks that are prevalent among minority, low-income and Tribal populations.

This action will not have disproportionately high and adverse human health or environmental effects on minority, low-income or Tribal populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. Specially, EPA's limited approval and limited disapproval of Regulation VIII would have the affect of strengthening environmental requirements throughout ICAPCD, and would not relax environmental requirements in any area. Thus it promotes environmental justice by increasing the level of human health and environmental protection for an area where, as the commenters note, relatively large portions of the population are low income and/or minority.

SEO #2: OWD notes that EPA's action may be subject to NEPA evaluation.

Řesponsé: EPA actions under the CAA are exempt from NEPA.¹⁷²

SEO #3: OWD believes that EPA should address increased management costs for Imperial County's OHV recreation areas and the effects on OHV areas outside Imperial County. As a result, OWD does not believe that EPA has a basis to claim (regarding the

Unfunded Mandates Reform Act), that no additional costs result from this action.

Response: As explained in our proposal, our action would approve and disapprove pre-existing requirements under State or local law, and impose no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.¹⁷³

III. EPA Action

No comments were submitted that change our assessment of Regulation VIII as described in our proposed action. Therefore, as authorized in sections 110(k)(3) and 301(a) of the Act, EPA is finalizing a limited approval of the submitted rules. This action incorporates the submitted rules into the California SIP, including those provisions identified as deficient. As authorized under section 110(k)(3), EPA is simultaneously finalizing a limited disapproval of the rules. As a result, sanctions will be imposed in Imperial County unless EPA approves subsequent SIP revisions that correct the rule deficiencies within 18 months of the effective date of this action. These sanctions will be imposed under section 179 of the Act according to 40 CFR 52.31. In addition, EPA must promulgate a Federal implementation plan (FIP) under section 110(c) unless we approve subsequent SIP revisions that correct the rule deficiencies within 24 months. Note that the submitted rules have been adopted by ICAPCD, and EPA's final limited disapproval does not prevent the local agency from enforcing them.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866, Regulatory Planning and Review

The Office of Management and Budget (OMB) has exempted this regulatory action from Executive Order 12866, entitled "Regulatory Planning and Review."

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Burden is defined at 5 CFR 1320.3(b).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the

¹⁷¹ Proposal TSD, p. 3.

¹⁷² See 40 CFR 6.101(b).

¹⁷³ 75 FR 8008, 8012–8013.

agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions.

This rule will not have a significant impact on a substantial number of small entities because SIP limited approvals and limited disapprovals under section 110 and subchapter I, part D of the Clean Air Act do not create any new requirements but simply approve and disapprove requirements that the State is already imposing. Therefore, because this limited approval and limited disapproval action does not create any new requirements, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Moreover, due to the nature of the Federal-State relationship under the Clean Air Act, preparation of flexibility analysis would constitute Federal inquiry into the economic reasonableness of State action. The Clean Air Act forbids EPA to base its actions concerning SIPs on such grounds. *Union Electric Co.*, v. *U.S. EPA*, 427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2).

D. Unfunded Mandates Reform Act

Under sections 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act"), signed into law on March 22, 1995, EPA must prepare a budgetary impact statement to accompany any proposed or final rule that includes a Federal mandate that may result in estimated costs to State, local, or tribal governments in the aggregate; or to the private sector, of \$100 million or more. Under section 205. EPA must select the most costeffective and least burdensome alternative that achieves the objectives of the rule and is consistent with statutory requirements. Section 203 requires EPA to establish a plan for informing and advising any small governments that may be significantly or uniquely impacted by the rule.

EPA has determined that the limited approval and limited disapproval action promulgated does not include a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments in the aggregate, or to the private sector. This Federal action approves and disapproves pre-existing requirements under State or local law, and imposes no new requirements. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, result from this action.

E. Executive Order 13132, Federalism

Federalism (64 FR 43255, August 10, 1999) revokes and replaces Executive Orders 12612 (Federalism) and 12875 (Enhancing the Intergovernmental Partnership). Executive Order 13132 requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed

This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132, because it merely approves and disapproves State rules implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. Thus, the requirements of section 6 of the Executive Order do not apply to this rule.

F. Executive Order 13175, Coordination With Indian Tribal Governments

Executive Order 13175, entitled "Consultation and Coordination with Indian Tribal Governments" (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." This final rule does not have tribal implications, as specified in Executive Order 13175. It will not have

substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to this rule.

G. Executive Order 13045, Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. This rule is not subject to Executive Order 13045, because it approves State rules implementing a Federal standard.

H. Executive Order 13211, Actions That Significantly Affect Energy Supply, Distribution, or Use

This rule is not subject to Executive Order 13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12 of the National Technology Transfer and Advancement Act (NTTAA) of 1995 requires Federal agencies to evaluate existing technical standards when developing a new regulation. To comply with NTTAA, EPA must consider and use "voluntary consensus standards" (VCS) if available and applicable when developing programs and policies unless doing so would be inconsistent with applicable law or otherwise impractical.

The EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" (February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their

mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies and activities on minority populations and low-income populations in the United States. The Executive Order has informed the development and implementation of EPA's environmental justice program and policies. Consistent with the Executive Order and the associated Presidential Memorandum, the Agency's environmental justice policies promote environmental protection by focusing attention and Agency efforts on addressing the types of environmental harms and risks that are prevalent among minority, low-income and Tribal populations.

This action will not have disproportionately high and adverse human health or environmental effects on minority, low-income or Tribal populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population. Specially, EPA's simultaneous limited approval and limited disapproval of Regulation VIII would have the effect of strengthening environmental requirements throughout ICAPCD, and would not relax environmental requirements in any area.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement

Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. section 804(2). This rule will be effective on August 9, 2010.

L. Petitions for Judicial Review

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by September 7, 2010. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirement.

Dated: June 15, 2010.

Jared Blumenfeld,

Regional Administrator, Region IX.

■ Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

■ 1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart F—California

■ 2. Section 52.220 is amended by adding paragraph (c)(345)(i)(E) to read as follows:

§ 52.220 Identification of plan.

* * * * * (c) * * * (345) * * *

(i) * * *

- (E) Imperial County Air Pollution Control District.
- (1) Rule 800, "General Requirements for Control of Fine Particulate Matter (PM-10)," adopted on October 10, 1994, revised on November 25, 1996 and revised on November 8, 2005.
- (2) Rule 801, "Construction & Earthmoving Activities," Rule 802, "Bulk Materials," Rule 803, "Carry-Out & Track-Out," Rule 804, "Open Areas," Rule 805, "Paved & Unpaved Roads," Rule 806, "Conservation Management Practices," adopted on November 8, 2005.

[FR Doc. 2010–16350 Filed 7–7–10; 8:45 am]