



September 28, 2011

Mr. Bruce Gibson
Chair
Air Pollution Control District
County of San Luis Obispo
3433 Roberto Court
San Luis Obispo, CA 93401

**Re: Draft Rule 1001 – Coastal Dune Dust Control Requirements
Comments for September 28th, 2011, SLO APCD Board Meeting**

Dear Mr. Gibson,

The California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division (OHMVR Division) appreciates the opportunity to comment on the September 6, 2011, San Luis Obispo County Air Pollution Control District (ACPD) Draft Rule 1001 – Coastal Dune Dust Control Requirements (Draft Rule).

The Draft Rule purports to establish a general application to any “Coastal Dune Vehicle Activity Area (CDVAA),” but in reality, the only target is the Oceano Dunes State Vehicular Recreation Area (SVRA). The OHMVR Division operates Oceano Dunes SVRA for the enjoyment of California citizens. The park offers 3,600 acres of beautiful scenery along the Pacific Ocean, including the beach, coastal sand dunes, wetlands, lakes, and riparian areas. Last year, the park provided almost 1.6 million visitors with access to the coast for camping, off-highway vehicle recreation, fishing, surfing, and other beach-oriented recreation. Approximately 2,100 acres of the park are closed to motorized recreation and managed as native habitat. State Park staff offers and hosts a variety of education and safety programs unique to the park, including youth safety clinics, Junior Ranger programs, guided walks, campfire programs and more. This park is important to California State Parks, to the off-highway vehicle and recreation communities, and to the local coastal economy.

Our comments fall into four general categories: 1) the need to focus on a Particulate Matter Reduction Plan (PMRP) at this stage of rulemaking; 2) the lack of scientific validation to support the underlying concept of comparative monitoring in the Draft Rule; 3) the need to provide sufficient time and process for implementation; 4) revised language of the Draft Rule. I outline these concerns here. Please consider these to be

preliminary remarks; the OHMVR Division intends to submit additional comments on the Draft Rule as the APCD moves forward with its rulemaking activities on this matter.

1. Any rulemaking at this stage should focus on the PMRP.

The OHMVR Division acknowledges the regional particulate matter problem and accordingly, began working collaboratively with the APCD and San Luis Obispo (SLO) County to evaluate pilot projects that could be incorporated into a PMRP. Thus we are concerned this Draft Rule was developed apart from the collaborative process and does not reflect scientific findings to date. Specifically, there is no agreement as to the degree to which Oceano Dunes SVRA activity contributes to elevated PM10 on the Mesa or how PM10 can be controlled and there is no scientific basis to estimate the scope of cost-effective control measures. Rather, the Draft Rule imagines that the APCD directive can be met, without taking into account the practicality of measures and the financial and environmental cost to the State.

The Draft Rule imposes a traditional “command and control” regulatory approach, which is not appropriate for the Oceano Dunes SVRA at this time. The Draft Rule needs to provide a flexible, iterative, and progressive process for the PMRP that allows the OHMVR Division to implement and validate PM10 monitoring and, if found to be appropriate based on the monitoring results, design, implement, evaluate, and manage control measures in that order. Instead, the Draft Rule seeks to establish a hard line performance standard for determining compliance based on an untested ambient monitoring system.

During the South County Particulate Matter (PM) Workshop on September 7, 2011, the APCD staff stated that “there is no stack we can stick a probe in” to instantly determine compliance status of the Oceano Dunes SVRA and that development of the PMRP will be an “iterative process.” We strongly support these remarks, and appreciate the time and energy APCD and SLO County staff have provided over the past year to collaboratively work with the us to examine and address the unique and complex coastal dune environment of Oceano Dunes SVRA and its potential effects on downwind PM10 concentrations in an iterative manner, first as part of the Memorandum of Agreement and then in support Desert Research Institute’s (DRI) Stage 1 Pilot Projects.

The Draft Rule does include a requirement for a PMRP (Rule C.1.) requiring inclusion of both: (1) “An APCD approved PM10 monitoring network containing a CDVAA Monitor and a Control Site Monitor.” and (2) “A description of all PM10 control measures that will be implemented to reduce PM10 emissions to comply with this rule, including the expected emission reduction effectiveness and implementation timeline for each measure.” The PMRP should be the focus of a rule, with the feasibility and scientific validation of comparative observations or other monitoring being among the first iterative steps in the PMRP.

While a monitoring network similar to that proposed in the Draft Rule may be part of the PMRP, validating the monitoring network must precede any attempt to adopt a rule that would otherwise subject the OHMVR Division to unknown, speculative violations for phenomena outside its control.

The OHMVR Division requests that any rule promulgated now focus solely on the development of a PMRP and allow the PMRP and APCD approval process of the PMRP to determine the scope of the monitoring and control measures. The PMRP would address all necessary details, including sand track-out prevention (now in Draft Rule as C.1.c.) and many other activities not specified in the Draft Rule. The PMRP would be binding on the OHMVR Division and failure to perform according to the PMRP would constitute a violation of a rule referencing the PMRP. That requirement would be sufficient for enforcement.

2. There is no validation of comparative PM10 measurement as a basis to support the Draft Rule in order to determine rule compliance.

There must be a process in place for the OHMVR Division and APCD to validate the results of PM10 monitoring before any monitoring-based performance requirement is imposed on the park through APCD rulemaking. The principal concept underlying the Draft Rule is that observations of ambient PM10 air concentrations at two locations are sufficient to conclude either rule compliance or rule violation. While simple in concept, in practice, it cannot be relied on as the primary means of determining compliance. We will submit further technical discussion of this issue, but the main points are highlighted here.

The Draft Rule's proposed monitoring concept is predicated on the availability of feasible, reliable, scientifically valid comparative observations. APCD has not demonstrated that this can be done at Oceano Dunes SVRA and surrounding area. It is by no means clear that the required comparative observations are feasible. Note that the DRI Pilot Project study did not use the measuring process proposed in the Draft Rule or indeed, any ambient air monitoring.¹ As the promulgator of the rule, APCD should demonstrate that the proposed approach is feasible, or if unable to do so, at least allow reasonable time for the OHMVR Division to obtain expert advice to be assured that it can indeed fulfill Draft Rule requirements. If it cannot be reliably concluded that comparative observations are feasible, the APCD will need to establish some other basis for determining rule compliance, such as compliance with action items in an adopted PMRP.

¹ Both the principal investigators at Desert Research Institute (DRI) and the APCD's own staff vigorously objected to any in-field PM10 monitoring as part of the pilot projects undertaken by DRI during April – May 2011 due to technical concerns and limitations. APCD staff cited the extremely variable results from monitoring and asserted that it would be essentially impossible to discern any pilot treatment effects. We concurred.

Such a validation process is essential to inform several aspects of comparative monitoring. As presently suggested in the Draft Rule, the comparison would be made for any 24-hour period. Given the variability in meteorology, there may be days when the CDVAA monitoring site exceeds the Control site and days when the converse is true. Some statistical measure may be needed to look at a number of exceedances over a longer period, such as the spring windy season, before inferences can be drawn about the effect of activities in the SVRA. Until such a validation process occurs, there is no basis for the current 24-hour performance measure as proposed in the Draft Rule.

Adoption of the Draft Rule must await implementation of such a validating procedure or, at the very least, implementation and enforcement of the rule must be conditioned on successfully establishing through the PMRP that the monitoring network will produce valid monitoring data on which control projects will be based and the performance standard enforced.

3. There needs to be adequate time for external approvals and for PMRP implementation.

The Draft Rule as proposed does not allow for constraints or conditions beyond the control of the OHMVR Division. While the OHMVR Division recognizes the APCD's mandate to address a regional PM problem, other agencies and the public will have an advisory or regulatory role in the OHMVR Division's compliance with the Draft Rule as written. The Draft Rule outlines a process and a schedule that does not adequately take into account external constraints such as State budget and statutory contracting procedures, compliance with California Coastal Commission regulations, and the need to reconcile potentially conflicting mandates to serve public recreation, maintain coastal dune ecological integrity, and manage State or federally protected species.

Implementation of measures required under the Draft Rule will require the OHMVR Division to obtain approval from other government agencies such as SLO County and/or the California Coastal Commission, as well as comply with the requirements of the California Environmental Quality Act (CEQA) and ensure compliance with the State and Federal Endangered Species Acts. The Draft Rule establishes an 18-month compliance schedule for the OHMVR Division to obtain all required permits from appropriate land-use and government and comply with the requirements of CEQA and the National Environmental Policy Act. Not only is this process required prior to planning, including validation of monitoring, this aggressive schedule assumes flawless coordination amongst multiple government agencies and allows minimal time for us to respond to public comments received on CEQA documents, such as an Environmental Impact Report. The extent of agency review periods and the public comments received on environmental documents are difficult to predict. We simply cannot be held responsible for compliance delays resulting from other agencies failing to act in a timely manner or from extensive public comments on environmental documents. The Draft Rule needs to include a provision that excludes the OHMVR Division from schedule-related violations

resulting from agency reviews and public comments or other conditions that are beyond our control.

4. Rule Language

As our preceding comments make clear, the OHMVR Division does not endorse the APCD's current simplistic approach to the broad problem of coastal dune particulate matter by relying on comparative monitoring for enforcement. If the APCD does pursue this approach, however, we suggest text changes to clarify what we believe is the intent of the current Draft Rule. Please see attached recommended changes to the language of the Draft Rule.

Some of the changes extend timelines to deal with technical and regulatory hurdles that are beyond OHMVR Division control. We suggest the rule make these extensions, contingent on the ongoing progress on the PMRP.

Other edits reflect the need to ensure that the monitoring comparison sites are comparable and that a procedure is contemplated in the event monitoring comparisons do not reveal correctable differences between PM10 measured at the CDVAA site and measurements at the Control Site Monitor or that control projects turn out not to be cost-effective in reducing PM10 exceedences.

* * *

Over the past year, the ACPD, SLO County, and the OHMVR Division have worked collaboratively to examine the feasibility of potential control measures at Oceano Dunes SVRA, culminating in the recent pilot projects designed and implemented by DRI. While the scope of the DRI pilot projects was necessarily limited, the pilot project results offer a promising start and we intend to follow up on this science-based approach in drafting the PMRP for APCD approval.

The DRI work did show the effectiveness of surface roughness elements and vegetation at reducing sand transport and consequent PM10 emissions. It also showed that riding was likely not a dominant source of PM10. DRI showed "...the variability in PM10 emissions among the test sites to be modest, generally less than a factor of 1.75 between the most emissive area (near fence locations) and least emissive straw bale site." (Final Report, September 15, 2011, page 52). Note that the straw bale site measurements were taken before the straw bales were placed – it is a heavily used riding area, but was the least emissive area observed by DRI. The current APCD approach seeks to impose a standard for violations on the Oceano Dunes SVRA based on an untested monitoring scheme and would levy fines against the State based on an assumption that high PM10 is a direct consequence of activities on the Oceano Dunes SVRA. None of the science in either the Phase 2 study, the OHMVR Division's meteorological monitoring, or in the DRI Pilot Project supports this approach. It would be irresponsible to persist on the simplistic, unfounded path of the current rule.

Mr. Bruce Gibson, SLO APCD

September 28, 2011

Page 6 of 6

For this reason, we request that the preliminary version of Draft Rule 1001, Coastal Dune Dust Control Requirements, focus on an iterative, progressive, and collaborative process to prepare and validate the monitoring methods, and prepare and obtain approval of the PMRP. Any specific reference to control measures, monitoring, and enforcement criteria should be deferred until there is a comprehensive framework in place to establish their feasibility and effectiveness.

Sincerely,

Phil Jenkins

Chief, OHMVR Division

CC: Larry Allen, Air Pollution Control Officer

Attachment

Note: Comments and proposed changes are highlighted.

DRAFT SEPTEMBER 6, 2011

RULE 1001 Coastal Dune Dust Control Requirements (*adopted xx/xx/xxxx*)

- A. APPLICABILITY. The provisions of this Rule shall apply to any operator of a coastal dune vehicle activity area, as defined by this Regulation, that is greater than 100 acres in size.
- B. DEFINITIONS. For the purpose of this Rule, the following definitions shall apply:
1. "APCD": The San Luis Obispo County Air Pollution Control District.
 2. "APCO": The San Luis Obispo County Air Pollution Control Officer.
 3. "Coastal Dune": means sand and/or gravel deposits within a marine beach system, including, but not limited to, beach berms, fore dunes, dune ridges, back dunes and other sand and/or gravel areas deposited by wave or wind action. Coastal sand dune systems may extend into coastal wetlands.
 4. "Coastal Dune Vehicle Activity Area (CDVAA)": Any area within 1.5 miles of the mean high tide line where public access to coastal dunes is allowed for vehicle activity.
 5. "CDVAA Monitor": An APCO-approved monitoring site designed to measure the maximum 24-hour average PM₁₀ concentrations directly downwind from the vehicle riding areas at the CDVAA. At a minimum, the monitoring site shall be equipped with an APCO-approved Federal Equivalent Method (FEM) PM₁₀ monitor capable of measuring hourly PM hourly concentrations continuously on a daily basis, and an APCO-approved wind speed and wind direction monitoring system.
 6. "CDVAA Operator": Any individual, public or private corporation, partnership, association, firm, trust, estate, municipality, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties, who is responsible for a CDVAA.
 7. "Control Site Monitor": An APCO-approved monitoring site or sites designed to measure the maximum 24-hour average PM₁₀ concentrations directly downwind from a coastal dune area comparable to the CDVAA but where vehicle activity has been prohibited. At a minimum, the monitoring site shall be equipped with an APCO-approved Federal Equivalent Method (FEM) PM₁₀ monitor capable of measuring hourly PM₁₀ concentrations continuously on a daily basis, and an APCO-approved wind speed and wind direction monitoring system. **The following criteria shall be used for selection of the**

Control Site Monitor to ensure that the CDVAA and Control Sites are similar, measure only emissions from the CDVAA, and produce comparable results: (a) geomorphology; (b) size of the open sand fetch; (c) upwind PM10 sources; and (d) prevailing wind regimes.

8. "Designated Representative": The agent for a person, corporation or agency. The designated representative shall be responsible for and have the full authority to implement control measures on behalf of the person, corporation or agency.
9. "Paved Roads": An improved street, highway, alley or public way that is covered by concrete, asphaltic concrete, or asphalt.
10. "PM 10": Particulate matter with an aerodynamic diameter smaller than or equal to a nominal 10 microns as measured by the applicable State and Federal reference test methods.
11. "PMRP": Particulate Matter Reduction Plan.
12. "Track-Out": Sand or soil that adhere to and/or agglomerate on the exterior surfaces of motor vehicles and/or equipment (including tires) that may then fall onto any highway or street as described in California Vehicle Code Section 23113 and California Water Code 13304. ["Carry-Out" is not used in rule.]
13. "Track-Out Prevention Device": A gravel pad, grizzly, rumble strip, wheel wash system, or a paved area, or other effective measures(s) located at the point of intersection of an unpaved area and a paved road that is designed to prevent or control track-out.
14. "Vehicle": Any self-propelled conveyance, including, but not limited to, off-road or all-terrain equipment, trucks, cars, motorcycles, motorbikes, or motor buggies.
15. [Original 15. "Visible Dust Emissions (VDE)" not relevant or referenced in rule.]
16. "24-Hour Average PM₁₀ Concentration": The value obtained by adding the hourly PM₁₀ concentrations measured during a calendar 24-hour period from midnight to midnight, and dividing by 24.
17. "CDVAA Exceedance": Whenever the 24-Hour Average PM₁₀ Concentration measured at the CDVAA Monitor exceeds 55 ug/m³ and is more than 20% greater than the Control Site monitor. [Meets intent of allowing for twice FEM 10% measurement tolerance.]

C. GENERAL REQUIREMENTS

1. The operator of a CDVAA shall prepare and implement an APCO-approved Particulate Matter Reduction Plan (PMRP) to minimize PM₁₀ emissions for the

area under the control of a CDVAA operator. The PMRP shall contain measures that meet the performance requirements in section 2 and include:

- a. An APCO-approved PM₁₀ monitoring network containing a CDVAA Monitor and a Control Site Monitor.
- b. A description of all PM₁₀ control measures that will be implemented to reduce PM₁₀ emissions to comply with this rule, including the expected emission reduction effectiveness and implementation timeline for each measure.
- c. A Track-Out Prevention Program according to an APCO approved Track-Out Prevention Device(s), method and schedule. [Original detail not appropriate at this stage of rulemaking.]

2. The CDVAA operator shall ensure that:

Implementation of the PMRP results in a net decrease in the PM₁₀ level downwind of the CDVAA as compared with at the Control Site Monitor, determined as follows: For each three-month season there shall be no greater than ten CDVAA Exceedances. [A place holder pending determination of a statistically valid measurement of actual difference between CDVAA and Control.]

3. The CDVAA operator shall ensure they obtain all required permits from the appropriate land-use agencies and other affected governmental agencies, and that the requirements of the California Environmental Quality Act (CEQA) and the National Environmental Quality Act (NEPA) are satisfied to the extent any proposed measures identified in the PMRP require environmental review.
4. All facilities subject to this rule shall obtain a Permit to Operate by the time specified in the Compliance Schedule.

D. RECORDKEEPING REQUIREMENTS: The CDVAA operator subject to the requirements of this Rule shall compile and retain records as required in the APCO approved PMRP. Records shall be maintained and be readily accessible for two years after the date of each entry and shall be provided to the APCD upon request.

E. COMPLIANCE SCHEDULE:

1. The CDVAA operator of the CDVAA shall use its best efforts, and subject to variance for conditions or events beyond its control, shall comply with the following compliance schedule:

- a. Obtain APCD and other agency approvals of the monitoring network; install the monitoring network; and validate the monitoring results by twenty-four (24) months from the date of rule adoption.

b. Obtain APCO approval of a proposed PMRP by thirty (30) months from date of rule adoption).

c. Obtain land use agency approval as specified in C.3. of all proposed PMRP projects by thirty-six (36) months from date of rule adoption.

d. Subject to variance for conditions beyond CDVAA Operator's control and/or Section F, the requirements of Section C.2 shall apply twenty-two (22) months from the date of APCO approval of the PMRP, or fifty-two (52) months from date of rule adoption.

e. The requirements of Section C.4 shall apply by fifty-two (52) months from date of rule adoption.

F. This rule will sunset and be of no further force and effect upon the occurrence of any of the following:

a. The monitoring network fails to validate that the CDVAA contributes more than 20% of the PM₁₀ level that naturally occurs as measured at the Control Site Monitor.

b. The PMRP projects fail to produce a reduction of PM₁₀ as measured by the monitoring network.