



Air Pollution Control District
San Luis Obispo County

October 3, 2016

Ronnie Glick, Senior Environmental Scientist
California Department of Parks and Recreation
Off-Highway Motor Vehicle Recreation Division, Oceano Dunes District
340 James Way, Suite 270
Pismo Beach, CA 93449

SUBJECT: Comments on the Draft Program Environmental Impact Report (State Clearinghouse #2012121008) for the Oceano Dunes State Vehicular Recreation Area Dust Control Program

Dear Mr. Glick:

This letter provides our comments on the August 2016 Draft Program Environmental Impact Report (DEIR) for the proposed Oceano Dunes State Vehicular Recreation Area (ODSVRA) Dust Control Program. Please note that most of the comments from our last letter on the February 6, 2015 Notice of Preparation (NOP) have not been addressed in this DEIR. That letter is attached for your reference and should be included and responded to as part of our current comments on this DEIR.

Of most importance, the EIR does not quantify the emission reductions needed to meet the requirements of San Luis Obispo County Air Pollution Control District (APCD) Rule 1001 Particulate Matter Reduction Plan (PMRP), nor does it quantify the emission reductions the proposed measures will achieve. We realize that the modeling to quantify the emission reductions needed to meet Rule 1001 and help precisely locate the areas where mitigation will be most effective is currently being prepared with the help of the Air Resources Board. We also realize that litigation has created pressure to prepare an EIR for the temporary projects that have been occurring seasonally. With these things in mind, it is the District's position the EIR will need to be substantially revised or a subsequent EIR prepared in the near future to address the new Plan that must be developed and adopted to meet the requirements of Rule 1001 based on the modeling results. Creation of the new plan and associated environmental review must occur as soon as the modeling is completed.

For this current EIR, the following issues should be addressed:

- The purpose of the project as stated on Page 1-1 is: *"to control and minimize dust and particulate matter (PM) emissions that are generated under strong wind conditions and*

- *subsequently transported downwind of Oceano Dunes SVRA*. This is inconsistent with the requirements of Rule 1001, which is the primary driver for all dust mitigation projects proposed at the ODSVRA. Thus, the primary purpose of this project should be to comply with the emission reduction requirements of APCD Rule 1001. The Rule requires preparing and implementing an APCD-approved PMRP that ensures anytime the 24-hour average PM10 concentration measured downwind of the riding area exceeds 55 ug/m³, it is no more than 20% above the 24-hour average PM10 concentration measured downwind of a comparable non-riding area. The proposed 5-year project plan described in this EIR does not meet that requirement and cannot be approved by APCD.
- The proposed setback of 1,100 to 1,500 feet from the shoreline in the La Grande tract should be eliminated because it excludes from dust controls some of the highest particulate emission zones identified in the OHMVR Division studies listed on Page 1-6. (See Attachment 1, below)
- On page 1-7 under the *Dust Control Project ODSVRA 2016 (DRI 2015c)* heading, the following statement is made: *"Despite reductions immediately downwind of the fencing array, a preliminary SLOAPCD analysis has indicated that the 2015 seasonal dust control measures may not have been effective at reducing PM10 levels at the SLOAPCD's CDF station; however, this preliminary finding may due to anomalous meteorological conditions in 2015, particularly in May 2015 (Zeldin and Tupper 2015)."* e. Our findings indicated that an anomalous meteorological year with much lower wind speeds than normal was likely responsible for reducing PM10 levels at our CDF site and elsewhere on the Mesa. That finding is no longer preliminary and is documented in our 2015 Annual Air Quality Report available on our website. Please make this correction in the Final EIR.
- On page 1-7 the following statement is made: *"... the OHMVR Division and the SLOAPCD, together with CARB, have reached a general consensus on an approach to dust control at Oceano Dunes SVRA that is reflected in, and forms the basis for, the proposed Oceano Dunes Dust Control Program."* This statement should be deleted from the Final EIR. The OHMVR Division developed this proposed project independently as part of the NOP process, with no input from APCD or ARB. The APCD expressed its strong concerns regarding the inadequacy of this proposal in its comments on the NOP (See Attachment 2). As a result, OHMVR suggested that APCD present an alternative project for analysis in the EIR. The APCD-recommended project is described and minimally evaluated in Section 12.4 of this document.
- On Page 2-1, OHMVR has misinterpreted the stated goals of the Consent Decree Agreement, as defined in the phrase: *"... to achieve an immediate goal of meeting the Federal PM10 standard at the monitor located on the Nipomo Mesa known as CDF and to provide ongoing progress toward achieving the State PM10 standards and meet the standards set forth in Rule 1001."* This statement consists of 3 separate and independent clauses: to immediately attain the Federal PM10 standard; to make ongoing progress toward attaining the State PM10 standards; and **meet the standards set forth in Rule 1001**. Meeting the standards set forth

- in Rule 1001 will not achieve the State PM10 standards, which are substantially more stringent than the performance standard in the Rule. As such, the consent decree agreement defines compliance as “...**meet(ing) the standards set forth in Rule 1001**”, not as “ongoing and best possible progress towards compliance with SLOAPCD Rule 1001 performance standard”, as OHMVR states in Section 2.1. Thus, the goals of this project need to be redefined to describe how the project will actually comply with Rule 1001, not “ongoing progress towards compliance”.
- The DEIR identifies three potentially unavoidable significant impacts from the proposed project, each of which is based on subjective interpretation of CEQA and the California Coastal Act, as described below.
 - **Impact REC 1: The Dust Control Program would limit and interfere with coastal vehicular recreation opportunities at Oceano Dunes SVRA.** This identified impact is based on OHMVR’s creation of their own significance threshold for impacts to Recreation that is found only in this document and goes beyond what is defined in the CEQA guidelines. As stated on Page 4-20, Section 4.3.1, OHMVR has created the following criterion for defining a significant impact: “In addition, the OHMVR Division has determined the project would have a significant environmental impact related to recreation and public access in the project area if it would: Substantially limit, reduce, or interfere with established coastal recreational opportunities at Oceano Dunes SVRA”. This self-defined “qualitative threshold” is then used as the basis for determining the proposed project would create a significant impact to Recreation that must be mitigated because it would temporarily or permanently reduce the size of the riding area by 78 to 113 acres (a 5.3 to 7.7% loss of riding acreage). The proposed mitigation is to move the most effective dust control measure available, the planting of vegetation, to outside the open riding and camping areas in the least emissive areas of park.

This mitigation is inconsistent with the goals of the project and the requirements of Rule 1001 and should be eliminated from consideration. No area should be excluded from consideration of dust controls without clear scientific justification that conclusively demonstrates controls in that area are not necessary to achieve the performance standard in Rule 1001.

- **Impact LUP-1: The Dust Control Program would conflict with the Pismo Dunes SVRA (now Oceano Dunes SVRA) General Development Plan and Resource Management Plan.** Impact LUP-1 identifies the loss of up to 78 to 113 acres of land inside the ODSVRA as a significant conflict with the Oceano Dunes SVRA General Development Plan and Resource Management Plan because “it would not perpetuate and enhance recreational use of OHVs in the SVRA”, one of the stated goals in that plan.¹ This subjective determination and resulting mitigation recommendation has no quantitative basis and results in focusing dust controls away from areas where they

can be most effective; this is inconsistent with the requirements of Rule 1001. This creates a conflict between the legal requirement to protect public health through compliance with Rule 1001 and the stated goal in your Plan. Thus, if the 5.3 to 7.7% reduction in riding area acreage is deemed inconsistent with your Plan, it may be necessary to update the plan to reflect the requirements of Rule 1001.

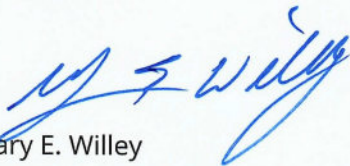
- **Impact LUP-2: The Dust Control Program could conflict with the California Coastal Act.** The California Coastal Act defines “coastal-dependent development or use” to mean *any development or use which requires a site on, or adjacent to, the sea to be able to function at all (PRC §30101)*. OHMVR has modified that definition in this EIR to include off-highway vehicle recreation at the ODSVRA as a coastal dependent use. This expansion of the Coastal Act definition is then used as the basis for several determinations in Chapter 5, Table 5-1 identifying the dust control project as inconsistent with Coastal Act Planning and Management Policies because it would interfere with OHV activity on the dunes. The California Coastal Commission should be asked to make a determination as to the appropriateness and applicability of OHMVR’s new interpretation and expansion of the Coastal Act definition of a coastal-dependent use.
- In section 12.2.3, the EIR discusses the potential voluntarily implementation of restrictions on the acreage within Oceano Dunes SVRA open to vehicular recreation and concludes this alternative would not be as effective as vegetation or wind fencing and straw bales. While we agree that vegetation is the most effective dust control measure available by far, temporary or permanent restriction of some areas to riding has been documented in OHMVRs own studies to significantly reduce sand transport within those areas. The *2013 Intensive Wind Erodibility Measurements at and Near the Oceano Dunes State Vehicular Recreation Area: Report of Findings (DRI 2015a)* conducted by OHMVR showed that sand transport within the snowy plover exclosure during the period closed to riding was comparable to that measured in the permanent nonriding areas, which measured 5 to 8 times less emissive for PM10 than measured in the riding areas.
- In the APCD proposed Alternate Control Program discussed in Section 12.4, the same potentially significant impacts are identified as for the Proposed Project. One additional potential impact identified for the APCD proposal is the potential modification of USFWS-designated critical habitat for the western snowy plover due to recommended reestablishment of vegetated foredunes in the near shore areas of the La Grande tract. However, this same near shore area is currently subject to high density camping and significant OHV activity throughout the year. Please explain how a series of vegetated foredunes in this area would have a more significant impact on snowy plover habitat than the current use of that area.

In conclusion, the proposed Project cannot be unconditionally approved by APCD as meeting the PMRP because the EIR does not show how the proposed measures are adequate to meet Rule 1001.

Because a revised or subsequent project description and EIR will need to be drafted after the modeling is completed, we have limited the current scope of our comments to the larger issues listed above that will also need to be addressed in the new EIR.

Thank you for the opportunity to provide input to this important process. Please feel free to contact me if you have any questions or need additional clarification on these comments.

Respectfully,



Gary E. Willey
Manager, Engineering and Compliance Division

GEW/lmg

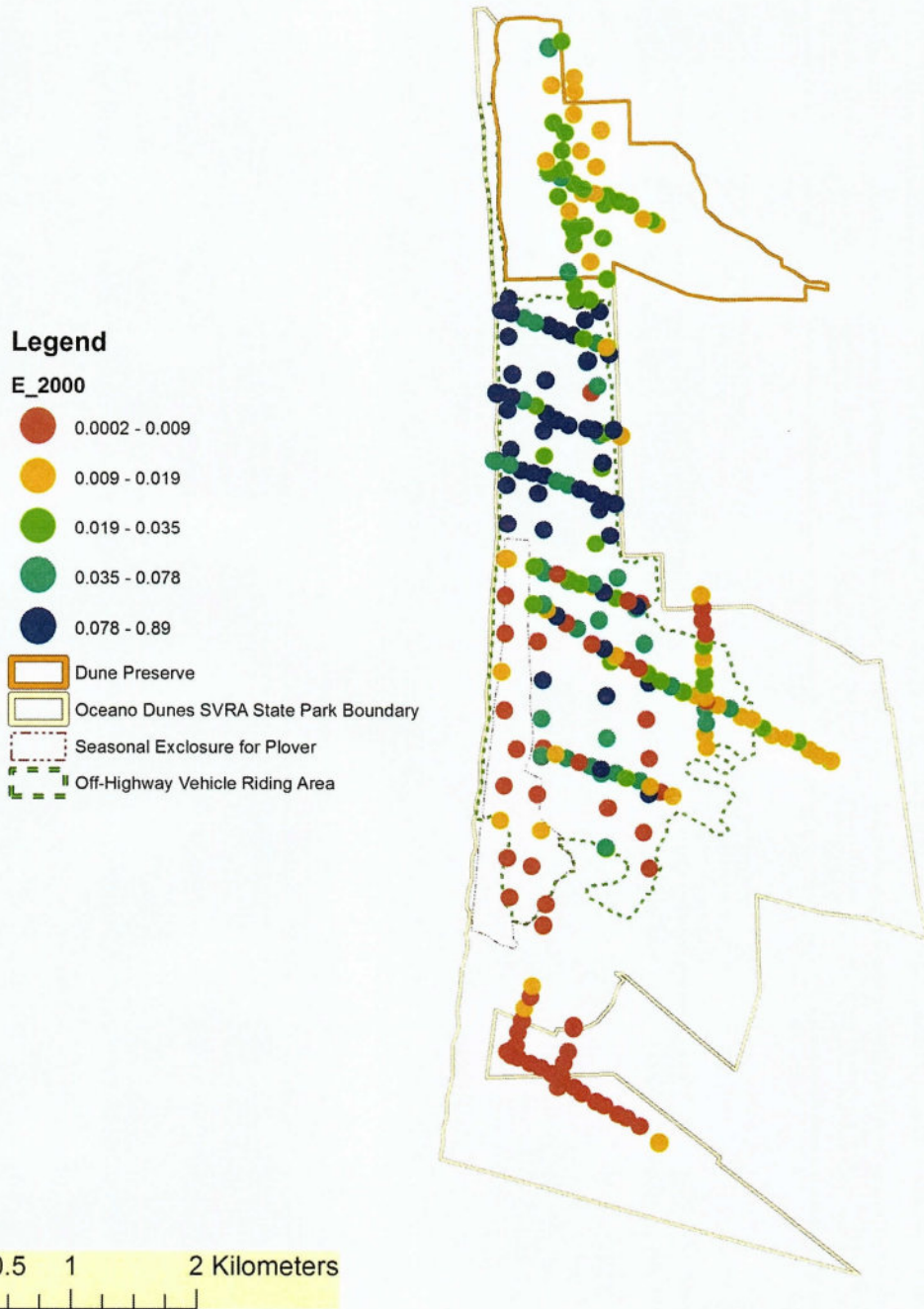


Figure 5. PI-SWERL-measured emissions at 2000 RPM (23 mph) in units of mg of PM10 /m2 sec. Categories are chosen so that each category contains 20% of all data. *

*Reprinted from the study performed for OHMVR Division, titled: *2013 Intensive Wind Erodibility measurements at and Near the Oceano Dunes State Vehicular Recreation Area: Preliminary Report of Findings*. Vicken Etyemezian, John Gillies, Dongzi Zhu, Ashok Pokharel, and George Nikolich, Division of Atmospheric Sciences, Desert Research Institute

**APCD Comments on the February 6, 2015 Revised Notice of Preparation for the Oceano Dunes
State Vehicular Recreation Area Dust Control Project Environmental Impact Report
(State Clearinghouse #2012121008)**



Air Pollution Control District
San Luis Obispo County

March 9, 2015

Ronnie Glick, Senior Environmental Scientist
California Department of Parks and Recreation
Off-Highway Motor Vehicle Recreation Division, Oceano Dunes District
340 James Way, Suite 270
Pismo Beach, CA 93449

SUBJECT: Revised Notice of Preparation for the Oceano Dunes State Vehicular Recreation Area Dust Control Project Environmental Impact Report (State Clearinghouse #2012121008)

Dear Mr. Glick:

This letter provides our comments on the February 6, 2015 Notice of Preparation (NOP) to evaluate potential environmental effects of the proposed Oceano Dunes State Vehicular Recreation Area (ODSVRA) Dust Control Project. As described in the NOP, the environmental review is being performed by the Off-Highway Motor Vehicle Recreation Division of the Department of Parks and Recreation (OHMVR Division) as part of the application process for a Coastal Development Permit to implement a 5-year dust control program at the OSDVRA.

The NOP states that: *"The proposed Dust Control Project (Project) is intended to improve air quality on the Nipomo Mesa"*. The intention of the Project should be to comply with San Luis Obispo County Air Pollution Control District (APCD) Rule 1001, which requires mitigation of the dust emissions and downwind impacts caused by offroad vehicle activity at the OSDVRA. This is an important distinction, because Rule 1001 requires the OHMVR Division to submit to APCD for approval, a Particulate Matter Reduction Plan (PMRP) that contains sufficient dust control measures to reduce particulate matter (PM) concentrations downwind of the riding areas to within 20% of the PM levels measured downwind of the nonriding areas. This performance standard is the primary means for determining compliance with the Rule.

The proposed Project needs to cover all things that could be part of the PMRP and that must be approved by APCD for compliance with the Rule. The proposed Project described in the NOP, however, cannot be approved by APCD because it artificially and unnecessarily limits both the areal extent of the project area and the scope of the proposed dust control measures. The proposed setback of 1,100 to 1,500 feet from the shoreline in the La Grande tract would exclude from dust controls one of the highest particulate emission zones identified in OHMVR Division's own studies (see the figure in Attachment 1, below). It is not appropriate to exclude any area for consideration of dust controls without clear scientific justification that conclusively demonstrates

controls in that area are not necessary to achieve the performance standard in the rule. We have seen no scientific studies or analyses that show controls in these areas are unnecessary. Thus, the proposed project area must be modified to include all riding areas within the ODSVRA. Further analysis through the EIR process may identify some riding areas as unsuitable or less than desirable for dust mitigation measures, but that analysis must be subject to scientific review and public comment before such a determination is made.

Regarding the actual dust mitigation measures proposed in the NOP, they appear to be identical to the temporary dust controls proposed for implementation during the 2015 wind season, which was not designed to meet the performance standard in Rule 1001. It is clear that a substantially larger dust control effort than the 2015 proposal will be needed to meet the rule requirements, yet there is no indication in this NOP that dust controls will be expanded over the 5 year period to meet the Rule performance standard, as discussed below:

- *"Temporarily deploying up to approximately 40 acres of wind fencing and/or straw bales at Oceano Dunes SVRA"* appears to be less controls than what OHMVR Division is currently proposing for dust mitigation this year in an effort to prevent further violations of the federal PM10 standard, which is only 1/3 as stringent as the rule performance standard. That proposal includes 40 acres of sand fencing in the highly emissive La Grande tract riding area, plus repositioning of existing hay bales located on 30 acres in the low emission nonriding areas to the southeast of the La Grande tract, which we believe is a much less effective area to plant future vegetation given your stated limited native seeding resources.

Over the last year, APCD and OHMVR Division have had many meetings and discussions with the California Air Resources Board and various scientific experts regarding the level of controls needed to comply with the rule. Those discussions have identified the need to substantially increase the amount of dust controls to reduce emissions to a level that complies with the performance standard in the Rule. In addition, restricting such controls to only temporary measures will not address the violations of both state and federal PM health standards that occur throughout the year as a result of dust emissions from the ODSVRA. Thus, permanent controls must be analyzed and considered in addition to the temporary controls described in the Proposed Project, and the amount of dust controls proposed must have a demonstrated potential to meet the requirements of Rule 1001.

"Planting up to 20 acres of vegetation per year" appears to represent what OHMVR Division is currently doing through their annual restoration plan under the existing CDP. That program, however, is required by the Coastal Commission to replace and/or enhance vegetation within existing fenced vegetated areas, primarily in the less emissive southern section of the SVRA. As such, it is not specifically designed to reduce dust emissions from the ODSVRA and has had no discernible effect in reducing downwind PM10 concentrations on the Nipomo Mesa. It is unclear in the NOP if this is just a continuation of the existing program or if the proposed Project will result in new vegetation plantings designed specifically for dust control in currently unplanted areas within the high emission zones of the riding area. This needs to be clarified.


- Additionally, the Proposed Project does not mention the possibility of reestablishing vegetated foredunes in the areas where they have been destroyed by vehicle activity, most of which is in the setback area proposed in the NOP. OHMVR Division's own study, titled Review of Vegetation Islands, Oceano Dunes SVRA (August 2007), documents the historical and current vegetation coverage at the ODSVRA and the nearly complete loss of vegetated foredunes in the riding area between 1970 and 1992 due to OHV activity. In that report, authored by the California Geologic Survey, they identify the need to reestablish vegetated foredunes along the coast to the west and northwest of all areas where inland vegetation is desired due to their ability to substantially reduce wind force and sand movement that will otherwise bury newly planted inland vegetation without that protection. It is our belief that establishing vegetation in the eastern areas or outside of the riding area is not highly effective. Much of the air borne dust generated in the west would tend to travel above the low level vegetation. Thus, the EIR should include an analysis of reestablishing vegetated foredunes within the riding areas upwind of the populated areas of the Nipomo Mesa, along with planting of additional vegetation islands further inland, as described in our January 27, 2015 letter to the Coastal Commission (Attachment 2).

SUMMARY

The scope of the dust control measures described in the NOP appears to be substantially inadequate to meet the emission reduction requirements and performance standard of Rule 1001. Thus, the Proposed Project would not be approvable by the APCD. The artificial limits placed on both the areal extent of the project area and the scope of the proposed dust control measures are unsupported by any scientific evidence or other documentation supporting the need for such limits. The EIR should evaluate a range of dust control scenarios, including reestablishing vegetated foredunes near shore in the La Grande tract and more southerly riding areas, together with additional vegetation islands further inland. Use of soil binders in the near shore high emissive areas and/or sand fencing in the back dune areas during the windy season to supplement the dust reductions provided by the vegetation is also appropriate to evaluate in the EIR. This combination of dust control measures appear to represent the most effective approach capable of meeting the requirements of Rule 1001, and for achieving the overall objective of reducing emissions in the riding areas to natural background levels while retaining offroad vehicle activity.

Thank you for the opportunity to provide input to this important process. Please feel free to contact me if you have any questions or need additional clarification on these comments.

Respectfully,



Gary Willey

Engineering and Compliance Division Manager

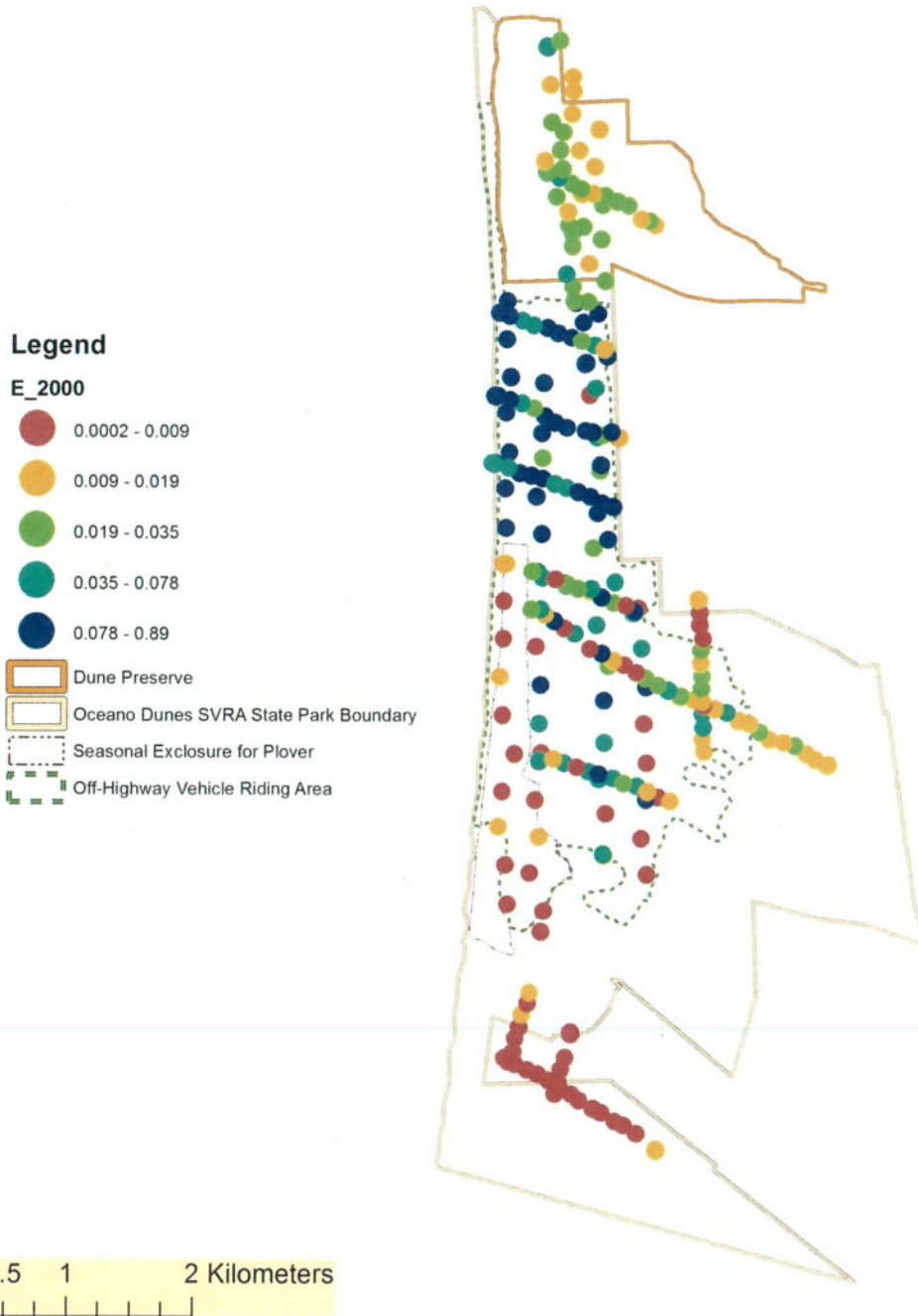


Figure 5. PI-SWERL-measured emissions at 2000 RPM (23 mph) in units of mg of PM10 /m2 sec. Categories are chosen so that each category contains 20% of all data. *

*Reprinted from the study performed for OHMVR Division, titled: *2013 Intensive Wind Erodibility measurements at and Near the Oceano Dunes State Vehicular Recreation Area: Preliminary Report of Findings*, Vicken Etyemezian, John Gillies, Dongzi Zhu, Ashok Pokharel, and George Nikolich, Division of Atmospheric Sciences, Desert Research Institute

Attachment 2

APCD January 27, 2015 Letter to Coastal Commission



Air Pollution Control District
San Luis Obispo County

January 27, 2015

Justin Buhr, Coastal Planner
Central Coast District Office
California Coastal Commission
725 Front Street, Suite 300
Santa Cruz, CA 95060

SUBJECT: Response to January 12, 2015 letter requesting information

Dear Mr. Buhr:

In your attached letter dated January 12, 2015, you have asked for data regarding all exceedances of the state and federal PM₁₀ standards recorded at our CDF monitoring station since 2008. The CDF monitor records the highest level of PM₁₀ and PM_{2.5} from all the monitors located throughout SLO County. This monitoring site was not established until 2010, however, so data is only available from that point forward, as shown in the following table:

Year	PM ₁₀			PM _{2.5}		Notes
	Federal 24-hr Exceedences	State 24-hr Exceedences	Annual Average (ug/m3)	Federal 24-hr Exceedences	Annual Average (ug/m3)	
2014	2	83	38.6	1	12.3	Unofficial, includes preliminary data.
2013	2	93	39.9	3	12.5	
2012	3	70	33.6	3	9.6	
2011	0	63	34.4	0	11.9	
2010	1	53	32.4	0	9.5	Partial year-site only operated 10 months.

- Federal PM₁₀ 24-hr standard is 150 ug/m3; State PM₁₀ 24-hr Standard is 50 ug/m3
 - State Standard for PM₁₀ annual average is 20 ug/m3. (There is no federal standard for the PM₁₀ annual average.)
 - Federal PM_{2.5} 24-hr standard is 35 ug/m3. (There is no state standard for 24-hr PM_{2.5}.)
- State and federal standards for PM_{2.5} annual average are both 12 ug/m3

You have also asked for our opinions on the following questions:

1. Whether or not OHV use contributes to dust emissions;
2. Where the most emissive parts of the ODSVRA are; and
3. What the SLOAPCD believes would be the most efficient and cost effective measures to reduce dust emissions to be in compliance with Rule 1001.

Fortunately, the data speaks for itself on questions 1 and 2 so no opinion is necessary. For question No. 3, there is also a substantive body of data from various studies performed at the ODSVRA and elsewhere regarding the most effective controls for reducing dust, but cost-effectiveness has many associated variables that require a more subjective interpretation. Our response to each of the questions is below.

1. Does OHV use contribute to dust emissions?

The San Luis Obispo County Air Pollution Control District (SLOAPCD) determined several years ago that off-highway vehicle use (OHV) at the Oceano Dunes State Vehicular Recreation Area (ODSVRA) was a significant contributor to dust levels measured on the Nipomo Mesa. This determination was reached after performing comprehensive air monitoring studies and extensive data analyses evaluating PM₁₀ levels downwind of the riding areas and comparable nonriding areas at the ODSVRA. Those studies showed that PM₁₀ concentrations downwind of the riding areas are significantly higher than those measured downwind of nonriding areas. As shown below in Figure 3.54 from the SLOAPCD *South County Phase 2 Particulate Study* (February 2010), average PM₁₀ levels measured at both the CDF and Mesa2 monitoring sites downwind of the riding areas were more than twice as high as those measured at the Oso site downwind of a nonriding area. These differences were measured despite the Oso site being considerably closer to shore and subject to much stronger winds than either the CDF or Mesa2 sites.

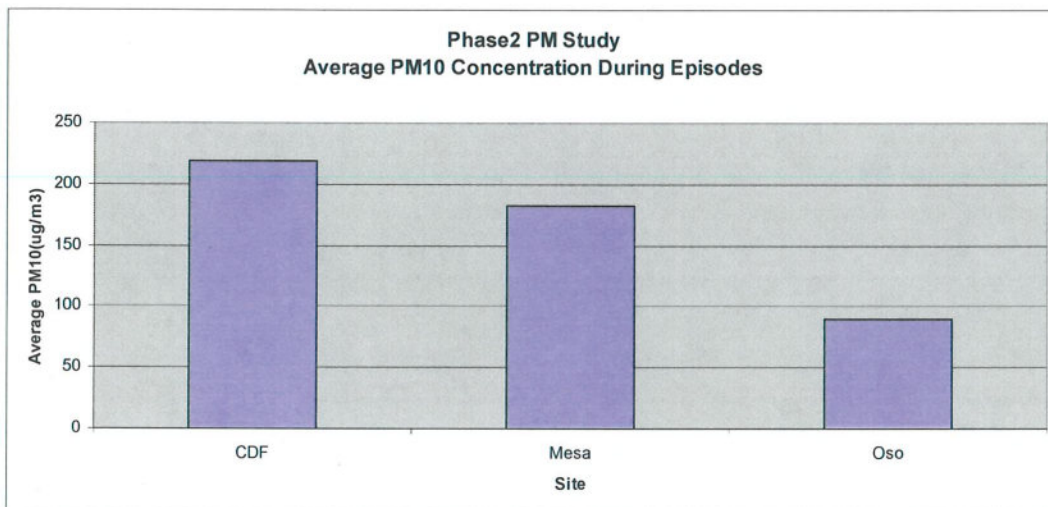


Figure 3.54 – Comparison of Average Downwind PM₁₀ Concentration During Episodes

More recently, the OHV Division of State Parks measured very similar results after performing extensive air monitoring studies in the Spring and Summer of 2013, the results of which are documented in the report prepared by their consultant, Desert Research Institute (DRI), titled: *Wind and PM10 Characteristics at the ODSVRA from the 2013 Assessment Monitoring Network* (September 2014). They installed monitoring equipment along 4 different transects in the ODSVRA in the direction of the prevailing northwest winds. Transect 1 was located in the Nature Preserve at the north end of the SVRA; Transect 2 was located within the LeGrande Tract riding area; Transect 3 was located within the larger riding area south of the LeGrande tract; and Transect 4 was located in the nonriding area southeast of Oso Flaco Lake. As shown in Figure 47 from that report (below), PM₁₀ levels measured at site 2C in the LeGrande tract riding area were far higher than all other sites, with PM₁₀ levels measured at site 3C in the more southerly riding area being next highest. PM₁₀ levels measured at sites 4B and 1C in the southerly and northerly nonriding areas were considerably lower than those measured in the riding areas, as shown in the figure below.

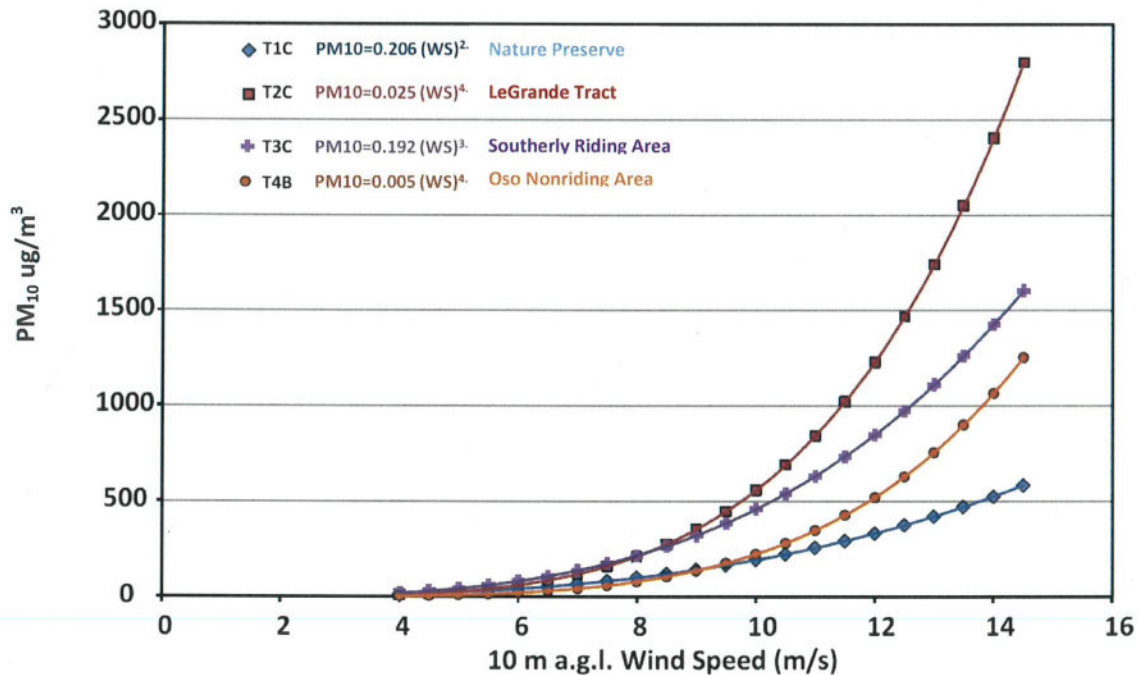
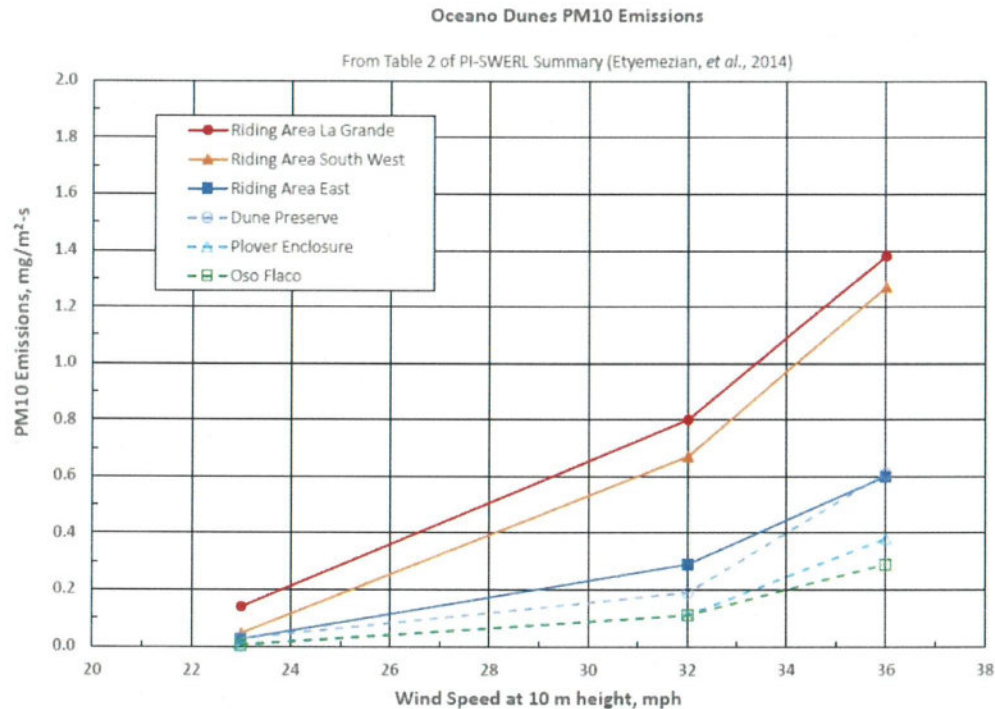


Figure 47. Relationships between mean 10 m hourly wind speed and PM₁₀ for the four e-Bam measurement positions for the 292° winds (NB: no 10 m wind speed measured at position T3B).

2. Where are the most emissive areas of the ODSVRA?

During the 2013 monitoring study referenced above, DRI scientists also performed extensive analyses of soil emissivity throughout the ODSVRA using their patented PiSwel measurement device. Over 350 measurements were performed to evaluate the relative emissivity of the riding areas and nonriding areas in the park. Their preliminary report, titled *2013 Intensive Wind Erodibility Measurements at and Near the Oceano Dunes State Vehicular Recreation Area: Preliminary Report of*

Findings (July 2014), clearly shows the riding areas to be substantially more emissive than the nonriding areas, with the LeGrande tract riding area up to 30 times more emissive than the Oso nonriding area, and up to 8 times more emissive than all nonriding areas combined. The figure below is a graph of the data presented in Table 2 of that report.



3. What does the SLOAPCD believe would be the most efficient and cost effective measures to reduce dust emissions to be in compliance with Rule 1001?

As mentioned above, there are a number of variables associated with answering this question, so I asked our consultant, Mel Zeldin, to provide his professional recommendations (attached). While Mr. Zeldin identified eliminating riding upwind of the affected populated areas as the most effective strategy, that action is not endorsed nor recommended by the SLOAPCD. We firmly believe effective dust control strategies are available to reduce emissions to a level that complies with Rule 1001 while continuing to allow recreational riding in the park, provided such measures are applied appropriately in the most emissive areas. We do, however, agree with and support his recommendation that replanting of vegetation is the most effective long-term strategy currently available.

In our opinion, reestablishing vegetated foredunes in the areas where they have been destroyed by vehicle activity would appear to be the most effective strategy, followed by establishing additional vegetation islands in the inland riding areas. Studies performed by DRI as described in their *Oceano Dunes Pilot Projects* report (July 2011) show vegetated areas to be nearly 100% effective in reducing sand movement and would provide year-round, permanent reductions; wind fencing is less than

half as effective at best, and provides only a temporary solution. Regarding the need to reestablish vegetated foredunes, that recommendation is provided in a substantive study commissioned by State Parks and performed by the California Geologic Survey. Their report, titled Review of Vegetation Islands, Oceano Dunes SVRA (August 2007), documents the historical and current vegetation coverage at the ODSVRA and the nearly complete loss of vegetated foredunes in the riding area between 1970 and 1992 due to OHV activity. In that report, the authors identify the need to reestablish vegetated foredunes along the coast to the west and northwest of all areas where inland vegetation is desired due to their ability to substantially reduce wind force and sand movement that will otherwise bury newly planted inland vegetation without that protection.

We believe the use of soil binders and sand fencing, as is currently proposed by State Parks for 2015 dust control, will provide immediate help in dust reduction, but are not adequate without significant revegetation to achieve compliance with Rule 1001. Nonetheless, soil binders have the potential to be far more effective than sand fencing in terms of dust reduction and cost and, if proven feasible for use at the ODSVRA, may be the best interim control measure before revegetation efforts are fully established. Thus, adequate testing of soil binders is essential to determining their potential effectiveness.

Summary

As documented in the studies described in our responses to questions 1 and 2 above, OHV use at the ODVSRA is clearly the major contributor to dust emissions generated there, and the Le Grande tract riding area is the most emissive area at that facility. In our opinion, reestablishing vegetated foredunes near shore and additional vegetation islands further inland, together with seasonal use of soil binders and/or sand fencing in the high emissive back dune areas, represents the most effective approach capable of meeting the requirements of Rule 1001, and for achieving the overall objective to reduce emissions in the riding areas to natural background levels while retaining offroad vehicle activity.

I hope these responses adequately answer the questions you posed. All studies referenced above are available on the SLOAPCD website at <http://slocleanair.org/air/pmstudydata.php>. Please feel free to contact me at (805) 781-5912 if you have any questions or need additional clarification on the issues addressed in this letter.

Sincerely,



Larry R. Allen
Air Pollution Control Officer

Cc: Christopher Conlin, OHV Division, State Parks
Kurt Karperos, California Air Resources Board

Enclosure(s)