



Air Pollution Control District  
San Luis Obispo County

August 7, 2017

Kevin Kahn  
District Supervisor  
Central Coast District Office  
California Coastal Commission  
725 Front Street, Suite 300  
Santa Cruz, California 95060

SUBJECT: APCD Comments on the OHMVR Coastal Development Permit Application and  
Proposed 5-Year Plan for Dust Mitigation

Dear Mr. Kahn:

Thank you for the opportunity to comment on the Coastal Development Permit (CDP) application submitted by the Off-Highway Motor Vehicle Recreation Division (OHMVR) of the California Department of Parks and Recreation. The application describes their proposed five-year plan for controlling airborne particulate matter emissions generated by off-road vehicle activity at the Oceano Dunes State Vehicular Recreation Area (ODSVRA). These emissions represent a significant and ongoing public health threat to downwind residents and have been the focus of considerable study and public concern for the past several years. APCD Rule 1001, adopted in November 2011, requires the development and implementation of an APCD approved Particulate Matter Reduction Plan (PMRP) to reduce dust emissions from the facility to within 20% of natural background levels.

The California Air Resources Board (CARB) has worked with APCD and OHMVR over the past few years to provide technical expertise and guidance in helping to resolve this difficult issue. As part of that process, CARB has developed an emissions and atmospheric dispersion model for the ODSVRA intended to help define the type, scope, and location of dust control measures needed to comply with Rule 1001. The modeling effort continues to evolve as new data becomes available and is currently being used in designing the dust control measures for the Spring 2018 windy season; we expect to present those results to the APCD Board at our September 27, 2017 meeting.

Unfortunately, the 5-Year plan submitted by OHMVR in their CDP application was prepared prior to completion of the model and has not been approved by the APCD. Our staff submitted

substantive comments on the proposed plan during the CEQA process and has informed OHMVR that a more comprehensive plan based on the CARB modeling must be prepared that demonstrates the ability to meet the requirements of Rule 1001 before APCD can approve it. We hope the new plan will be completed before the end of the year.

Nonetheless, we believe the type and general locations of dust control measures described by OHMVR in their CDP application and analyzed through the EIR is broad enough and provides sufficient flexibility to allow the Coastal Commission to grant the permit with the following important caveats:

1. The boundary of the proposed dust mitigation project area (Figures 2.8 and 2.9 in OHMVR's CDP application) contains a substantial setback from shore and excludes some northern riding areas. Such boundary limits preclude some of the most emissive areas in the ODSVRA from consideration for dust controls, as shown in OHMVR's own emissivity studies and on the CARB emissions modeling map (Attachment 1). Such exclusions are inappropriate without scientific evidence or modeling that demonstrates controls in these areas are not needed to protect public health. Thus, the proposed project area should not exclude any highly emissive areas from consideration as possible locations for dust control.
2. The amount of mitigation proposed to be installed in a given year (40 acres of wind fencing and 20 acres of vegetation) is a self-imposed constraint by OHMVR that may not allow them to meet compliance with the emission reduction requirements of Rule 1001. Thus, the Commission approval process should consider the ability to install, in any given year, any amount of dust mitigation shown to be necessary by the CARB modeling and the APCD-approved PMRP, provided it complies with Coastal Commission requirements.
3. Studies conducted by the Desert Research Institute (DRI), under contract to OHMVR, have shown that vegetation is the most effective method of dust control; it is 90% - 99% effective at reducing sand flux, and is also the least costly control method over time, providing permanent rather than seasonal emission reductions. OHMVR's proposal to plant most of the new vegetation outside the riding areas is contrary to the data from the comprehensive scientific field studies performed by DRI at the ODSVRA, which clearly show the riding areas to be far more emissive than the nonriding areas (Attachment 2). Planting vegetation outside the riding areas would be substantially less effective in reducing dust emissions than planting within the riding areas, especially in the most emissive riding area zones. To protect public health in the most timely and cost-effective manner, all vegetation planting for dust control should occur within the most emissive riding areas shown in Attachments 2 and 3.
4. In addition to the wind fencing arrays proposed in the CDP application, the list of appropriate dust control measures in the permit should also include the ability to simply install perimeter fencing around certain highly emissive "hot spots". As shown in Attachment 3, the temporary perimeter fencing installed around the Snowy Plover

Enclosure to prohibit riding in that area during the nesting season appears to be highly effective at reducing sand transport while it's in place. Such fencing could be installed quickly and cheaply in specific high emission zones and begin providing dust relief while more comprehensive control measures were under development.

Timely consideration and approval of a comprehensive CDP that addresses the four issues identified above is essential to allow the dust mitigation process and critical protection of public health to move forward under the joint efforts of OHMVR, CARB, and the APCD. We are confident such approval will facilitate a robust adaptive management process where specific annual mitigation efforts deemed consistent with an APCD-approved Particulate Matter Reduction Plan are presented to Commission staff before implementation to ensure consistency with the CDP.

We appreciate the opportunity to provide input on this important decision-making process and look forward to working with you and your staff to ensure the implementation of effective solutions to protect public health and the environment while enabling continued public access to the many recreational opportunities provided by the ODSVRA. If you have any concerns or questions regarding these comments, please do not hesitate to contact me.

Sincerely,



LARRY R. ALLEN  
Air Pollution Control Officer

LRA/lmg

cc: Mat Fuzie, OHMVR  
Kurt Karperos, CARB

Attachments

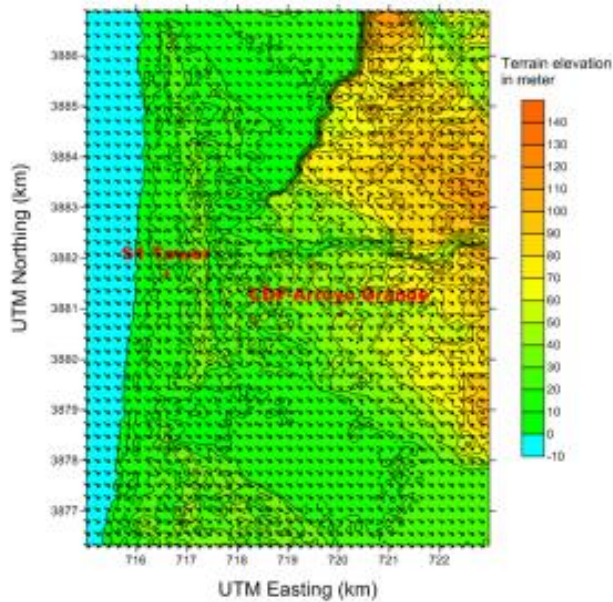
## Attachment 1

### CARB Emissions Modeling Map for ODSVRA

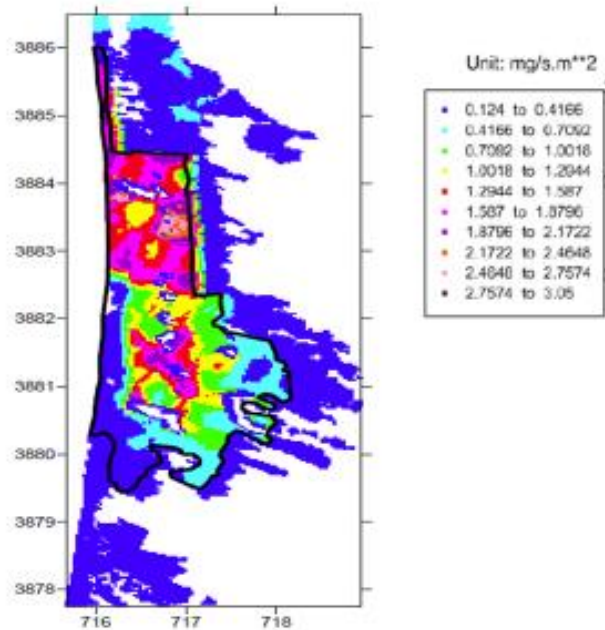
# Modeling Inputs

4

Gridded Wind Field



Gridded Emissions Field



Slide 4 of CARB Presentation to APCD Board on June 28, 2017

[http://slocounty.granicus.com/MetaViewer.php?meta\\_id=340679](http://slocounty.granicus.com/MetaViewer.php?meta_id=340679)

## Attachment 2

### 2013 Intensive Wind Erodibility Measurements at and Near the Oceano Dunes State Vehicular Recreation Area: Report of Findings

Vicken Etyemezian, John Gillies, Dongzi Zhu, Ashok Pokharel, and George Nikolich  
Division of Atmospheric Sciences, Desert Research Institute

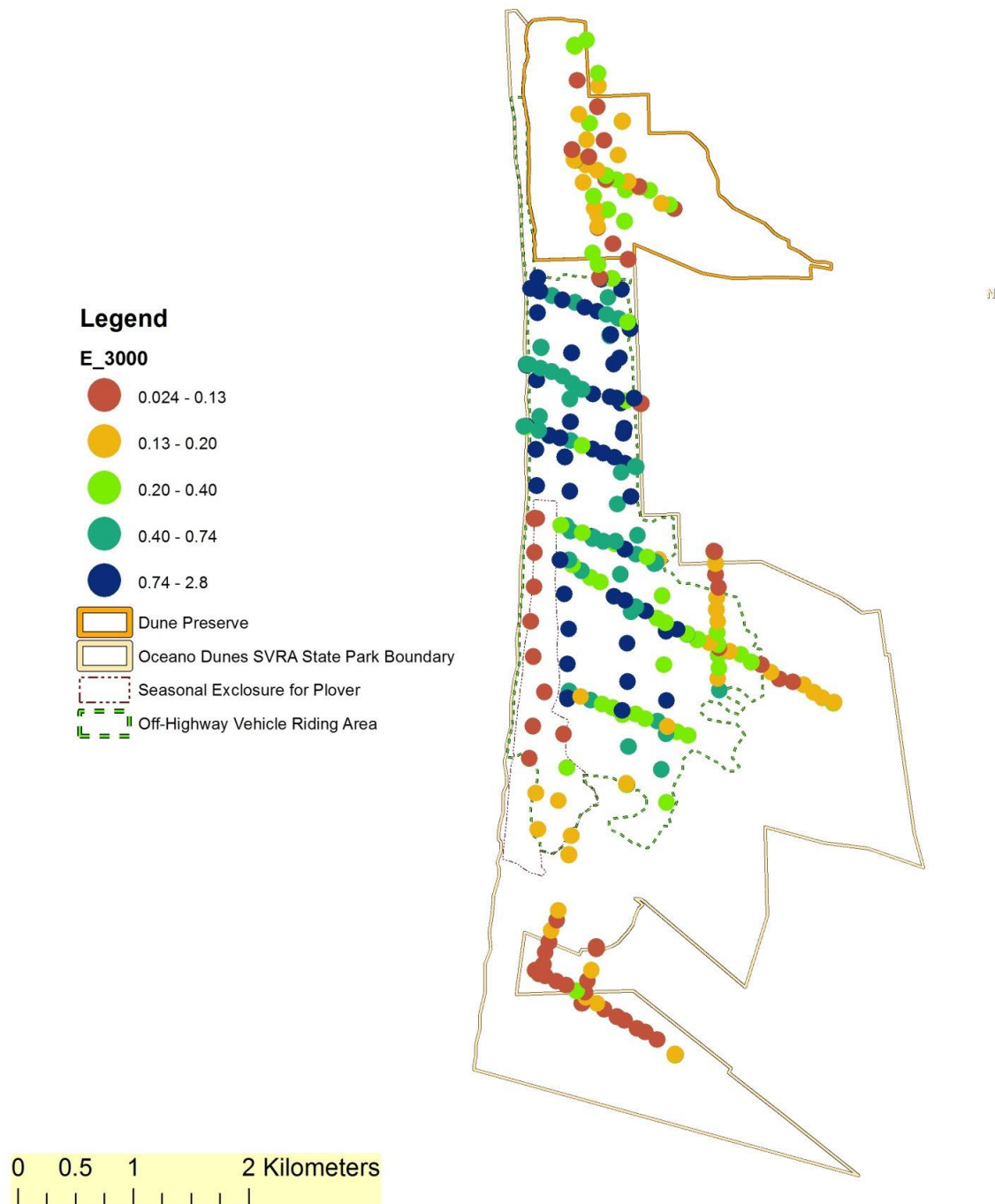


Figure 6. PI-SWERL-measured emissions at 3000 RPM (32 mph) in units of mg of PM<sub>10</sub>/m<sup>2</sup> sec. Categories are chosen so that each category contains 20% of all data.

Table 2. Summary of threshold RPM and PM<sub>10</sub> emissions by location grouping (number of independent tests in each group shown in parentheses).

|                               | Threshold<br>wind<br>speed<br>(mph) | PM <sub>10</sub> Emissions<br>at 2000 RPM (23<br>mph) (mg/m <sup>2</sup> sec) | PM <sub>10</sub> Emissions at<br>3000 RPM (32<br>mph) (mg/m <sup>2</sup> sec) | PM <sub>10</sub> Emissions at<br>3500 RPM (36<br>mph) (mg/m <sup>2</sup> sec) |
|-------------------------------|-------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Oso Flaco (41)                | 23                                  | 0.0044                                                                        | 0.11                                                                          | 0.29                                                                          |
| Plover Exclosure (25)         | 21                                  | 0.0080                                                                        | 0.11                                                                          | 0.38                                                                          |
| Dune Preserve (66)            | 19                                  | 0.028                                                                         | 0.19                                                                          | 0.61                                                                          |
| All Non-ride (132)            | 21                                  | 0.017                                                                         | 0.15                                                                          | 0.47                                                                          |
|                               |                                     |                                                                               |                                                                               |                                                                               |
| Riding Area – La Grande (122) | 19                                  | 0.14                                                                          | 0.80                                                                          | 1.38                                                                          |
| Riding Area South West (44)   | 22                                  | 0.046                                                                         | 0.67                                                                          | 1.27                                                                          |
| Riding Area East (62)         | 21                                  | 0.026                                                                         | 0.29                                                                          | 0.60                                                                          |
| All Ride (228)                | 20                                  | 0.088                                                                         | 0.64                                                                          | 1.15                                                                          |
|                               |                                     |                                                                               |                                                                               |                                                                               |
| Ratio: All Ride/All Non-ride  |                                     | 5.2                                                                           | 4.3                                                                           | 2.4                                                                           |
| Ratio: La Grande/All Non-ride |                                     | 8.1                                                                           | 5.4                                                                           | 2.9                                                                           |

**Full report available at:**

[http://www.slocleanair.org/images/cms/upload/files/2013\\_PI-SWERL\\_Report%20of%20Findings\\_07\\_2015\\_Final.pdf](http://www.slocleanair.org/images/cms/upload/files/2013_PI-SWERL_Report%20of%20Findings_07_2015_Final.pdf)