



DEPARTMENT OF PARKS AND RECREATION

Off-Highway Motor Vehicle Recreation Division
PO Box 942896
Sacramento, California 94296
Telephone: (916) 902-8598

Armando Quintero, *Director*

OFF-HIGHWAY MOTOR VEHICLE COMMISSION

Arroyo Grande, CA

May 16, 2024

STAFF REPORT: Oceano Dunes SVRA Air Quality Update
STAFF: Jon O'Brien, Environmental Program Manager
SUBJECT: Update from Scientific Advisory Group Chair

Summary

State Parks has been working with the Scientific Advisory Group (SAG) and the San Luis Obispo County Air Pollution Control District (APCD) to develop an 'excess emissions' framework to meet the updated air quality targets of the Stipulated Order of Abatement (SOA; Case No. 17-01)¹ for Oceano Dunes State Vehicular Recreation Area (ODSVRA).

That Framework² was submitted by the SAG to Parks and the APCD on December 19, 2023. The recommendation from the SAG included the following:

- In the model, ODSVRA is to be divided into emissivity zones based on location (non-riding area north, riding south, etc) instead of using the 20m by 20m grid that had been used in the past
- All Pi-Swirl data from 2013 to 2022 will be used for both the current and pre-disturbance modeling scenarios
- The median will be used to characterize the emissivity in the zones for both the current and the pre-disturbance scenarios

As per previous iterations of the model, the current emissivity of the dunes was to be compared to the pre-disturbance scenario to determine compliance with the SOA. The pre-disturbance scenario was to be based on the non-riding area emissivity overlaid on the riding area.

State Parks sent a letter to the APCD concurring with the Framework on January 16, 2024³. The APCD approved the modeling assumptions on February 8, 2024⁴. Since that time, State Parks has been working with the Desert Research Institute (DRI) and the SAG to run the air quality model as per the Framework.

State Parks submitted the initial results to the APCD on March 15, 2024⁵. According to the DRI report, the pre-disturbance scenario has a mass emissions of 166 metric tons per day, whereas the current scenario has a mass emissions of 148 metric tons per day. These initial results indicate that the mass emissions coming off ODSVRA are NOT in excess of naturally occurring emissions.

There are outstanding items that will impact the results to be addressed as part of the 2024 Annual Report and Work Plan (ARWP), including several updates to the model. In addition, there will be a full campaign of emissivity measurements on the dunes in 2024 that will better inform the air quality program, and mass emission values.

A first draft of the ARWP is due to the APCD on August 1, 2024. The Excess Emissions Framework and results will be presented to the APCD Hearing Board for final approval on October 15, 2024.

At the May 16, 2024 OHV Commission meeting, the SAG chair, Dr. Bernard Bauer, will give an update on the excess emissions framework and results, and the science around the air quality program in general.

Commission Action

For information only.

Attachments

1. Amended Stipulated Order of Abatement, October 18, 2022: <https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/SOA%2017-01%20Second%20Amendment%20Final%20Adopted%2010-14-2022%20%26%20Filed.pdf>
2. SAG Excess Emissions Framework: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/SAG%20Memo_Emissivity%20Grids%20for%20Future%20Modeling%20of%20Excess%20Emissions%20-%2020231219.pdf
3. State Parks concurrence letter: <https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/Concurrence%20letter%20to%20APCD.pdf>
4. APCD approval of modeling assumptions: <https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/Modeling%20Conditional%20Approval.pdf>
5. Initial 'excess emissions' modeling results: https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/Modeling%20to%20Determine%20the%20Condition%20of%20Excess%20Emissions%20for%202023%20ODSVRA%2003_14_2024.pdf