

Ray Kapahi     April 5, 2021

Summary of Odor Measurements at  
Outdoor Hemp Facilities



## DRAFT TECHNICAL MEMORANDUM

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**To:** Charlene Carveth  
Agricultural Commissioner  
El Dorado County, California

**Date:** April 5, 2021

**From:** Ray Kapahi *RK*  
Tel: 916-687-8352  
Tel: 916-687-8352  
E-Mail: [ray.kapahi@gmail.com](mailto:ray.kapahi@gmail.com)

**Subject:** Summary of Odor Measurements at Outdoor Hemp Cultivation Facilities

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Per your request, I have attached the odor measurements at three locations in El Dorado County that have outdoor hemp growing operations. I have also attached the results of cannabis odor measurements at a  $\frac{3}{4}$  acre site in Yolo County (Esparto).

The measurements were taken along 4 corners of each property using the Nasal Ranger olfactometer.

Based on the odor intensity measurements and our own on-site observations, we found no significant difference in odors that are present near a hemp versus cannabis cultivation site. Most of the odor measurements were below 7 DT. We found that odors do fluctuate and there were brief periods (1-2 seconds) of higher intensity odors that were not detected during the use of the Nasal Ranger.

We are looking for other hemp cultivation sites to supplement the data we have collected to date.

Let me know if you have any questions or require additional information.

### Acknowledgement

We wish to thank David Harde, David Ross and Casey Labitt for allowing our staff access to their sites to conduct odor measurements.















# *Certificate of Completion*

*Richard Ensminger*

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## Nasal Ranger Inspector

Odor Assessment & Measurement for Ambient Odors

This course prepares the individual to make odor observations and investigations, to record pertinent information, and to report the data and findings to management or officials. (3.5TCH)



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