

**DOCKETED**

<b>Docket Number:</b>	21-SPPE-01
<b>Project Title:</b>	CA3 Backup Generating Facility-Vantage
<b>TN #:</b>	240596
<b>Document Title:</b>	Ramboll Air Quality Memorandum - CA3BGF
<b>Description:</b>	N/A
<b>Filer:</b>	Scott Galati
<b>Organization:</b>	DayZenLLC
<b>Submitter Role:</b>	Applicant Representative
<b>Submission Date:</b>	11/15/2021 11:44:10 AM
<b>Docketed Date:</b>	11/15/2021

## MEMORANDUM

To: Simon Casey  
Vantage Data Centers

From: Shari Beth Libicki, PhD and Emily Weissinger, PE  
Ramboll US Consulting, Inc.

Subject: **REVIEW OF PROPOSED DESIGN CHANGES FOR THE VANTAGE CA3  
DATA CENTER PROJECT ON AIR QUALITY IMPACT CONCLUSIONS  
SANTA CLARA, CALIFORNIA**

Ramboll US Consulting Inc. ("Ramboll") was asked by Vantage Data Centers ("Vantage") to evaluate whether proposed design changes at Vantage's CA3 Project would alter the conclusions presented in Ramboll's air dispersion modeling that was submitted to the California Energy Commission (CEC) in Vantage's Small Power Plant Exemption application and in subsequent responses to CEC data requests. Ramboll understands that the proposed design changes are being made in response to comments received from the City of Santa Clara and involve a change in the configuration of some of the administrative space on the western side of the main data center building. They also involve a reduction in the footprint of the data center building by 8 feet on the southern edge to accommodate a fire lane. Concurrent with this exercise, Ramboll decreased the modeled building height from 88.75 feet to 87.5 feet to remain consistent with the most recent project description and conservatively incorporated the noise barrier/screening wall surrounding the chillers on top of the building.

Given that these design changes are small in scale, Ramboll would not anticipate a significant change in conclusions reached in the prior modeling. To test this assumption, Ramboll performed a series of test runs that incorporated the proposed design changes. For these runs, Ramboll evaluated both the annual and monthly generator testing scenarios and focused on the following pollutants and averaging periods for which prior results were within 80 percent of the applicable ambient air quality standard or significance threshold:

- Nitrogen dioxide (NO<sub>2</sub>) – 1 hour
- Particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) - Annual
- Diesel Particulate Matter (DPM) – Annual (input to the health risk analysis [HRA])

For each of the above scenarios, Ramboll observed a reduction in the maximum impact. Given that the other pollutants and averaging times in the original modeling were even farther beneath the applicable standards/significance thresholds, Ramboll expects that there would be no change in the conclusions presented to the CEC as a result of the proposed design changes.

November 15, 2021

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