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Water Availability Analysis Clarification Memorandum

May 9, 2025

MEMORANDUM

TO: Andrew Amelung

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FROM:

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President, O'Connor Environmental, Inc.

SUBJECT: P24-00191 Vine Cliff Winery Alteration-Clarification of Water Use in WAA

This memorandum clarifies the characterization of water use associated with a new kitchen facility in the Water Availability Analysis (WAA) for the subject project. The WAA, dated September 18, 2024, simply states that "[T]he proposed project actions include the addition of a commercial kitchen. However, water use on the project parcel will not change as a result of this as precious (sic) water demand estimates assume water demand based on the annual number of attendees at catered events which will not change between existing and proposed conditions as a result of this project. No change in water use is expected as part of this project" (pg. 5). Note that "precious" is a typographical error; this should read "previous". Several considerations are taken into account in this memorandum to make plain how this change in water use was estimated and why we characterized it as "no change".

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First, this WAA is updated from a WAA for Vine Cliff Winery completed in 2017. This updated WAA was prepared to disclose the proposed change in water use, to bring the WAA up to date in conformance with County requirements adopted in 2022 for Tier 1 analyses (prescribed use of average annual precipitation for the period 2012 through 2021 for purposes of estimating annual groundwater recharge), to perform an updated well search on adjacent parcels to determine whether there are new wells that could be influenced by project wells within the scope of a Tier 2 WAA, and to review development/water use status on nearby parcels for any significant changes in water demand within the groundwater recharge area used for the Tier 1 analysis.

Second, the 2017 WAA implicitly assumed that the visitor events were catered on-site, consequently the new kitchen used for events catered on-site was already accounted for with respect to water use. In fact, Vine Cliff Winery events used off-site catering and portable toilets for events since 2017 and water use would be expected to be lower than estimated. Use of off-site catering and portable toilets would likely bring the per-guest water use duty of 15 gal/guest to near zero. Summit Engineering, the wastewater system engineer for Vine Cliff Winery, estimated in September 2024 that on-site catering would add 5 gal/guest for use of kitchen

wastewater; this estimate assumes that portable toilets will continue to be used for events with more than 15 guests.

The permitted annual guest count for catered events is 2,100; kitchen wastewater would therefore total 10,500 gallons per year, equivalent to 0.032 acre-feet per year. Table 3 on page 6 of the WAA shows 0.10 acre-feet per year for catered events; a more accurate estimate would be 0.03 acre-feet per year (rounded to the nearest 0.1 acre-feet per year) which is about 0.07 acre-feet per year less than stated in Table 3. The sub-total for Guest & Employee Use in Table 3 could be more realistically reported as 0.32 acre-feet per year rather than 0.39 acre-feet per year.

Finally, the 2017 WAA was developed to permit increases in visitor and employee use at Vine Cliff Winery; the updated 2024 WAA includes the same visitor and employee uses that were incorporated in the 2017 WAA. We utilized standard use duties for guests and visitors as set forth in the Napa County WAA Guidelines (2015). Hence, it could be concluded that there is no proposed change in groundwater use for purposes of the WAA update. Furthermore, since the quantities of groundwater use associated with visitors and employee use are relatively small (0.39 acre-feet/year as reported in Table 3 of the WAA) and comprise only 2.3% of total groundwater use, we judged that the overall change was negligible. Decreasing the water duty for 2,100 guests by 0.07 acre-feet per year represents a change in overall groundwater use of 0.004% for the Vine Cliff Winery parcel as described in the WAA

Additional errata: the third column header in Table 6 on page 9 of the WAA reads "Dry Water Year (2014)"; this should read "Average Water Year 2012-2021".