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# Wastewater Feasibility Study



## FEASIBILITY REPORT ON SITE SANITARY WASTE WATER FACILITIES

**ZD WINES** 

8383 SILVERADO TRAIL NAPA, CA 94558

APN 030-200-005

Prepared for:

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#4114037.0

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Napa County Planning, Building & Environmental Services



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#### I. Executive Summary

The present owners of the ZD Winery, in good faith, voluntarily, pursuant to the existing Use Permit, including but not limited to the 1990 Project Revision Statement, are requesting confirmation that ZD Winery is entitled to the existing employees, visitation and parking as follows: 25 Full-time Employees, 10 Part-time Employees, 225 Visitors daily and 33 Parking Spaces. The project proposes no increase in visitation, full-time or part-time employees or production and no new construction.

#### II. Existing Sanitary Septic System

Information from Napa County Environmental Health Department files for the parcel show an existing sanitary wastewater system designed for a peak flow capacity of 1,944 gpd and utilizes a standard, 1,080 lineal foot, leach field to treat and dispose of sanitary wastewater. The sanitary waste is distributed to a standard leach field. A 100% reserve standard leach field is located adjacent to the primary leach field.

#### III. Existing Process Wastewater System

The winery is served by an independent process wastewater system. This system is designed to serve a daily discharge of 3,000 gpd. The system consists of a membrane bio reactor (MBR) and utilizes the treated water for supplemental irrigation.

#### IV.WINERY DOMESTIC WASTEWATER GENERATED

The existing wastewater generation is shown in Table 1 below. The number of employees and private promotional event visitors is based on information provided by the applicant. The number of peak tasting visitors is 225.

The projected flow is based on Napa County Environmental Management guidelines. The following is a summary of the estimated flows from the proposed visitation for the peak day use of the facility.



Table 1 - Daily Visitors and Mid-Size Marketing Event

Use	Source	Number	Projected Flow (gpd)	Total Flow (gpd)
	Full-time Employees	25 √	15	375
<u>≻</u>	Part-time Employees	10 V	15	150
Winery	Tasting Visitors	225 /	3	675
>	Mid-size Marketing Event Visitors (off-site caterer)	74	10	740
	Day Totals	334		1,940

Table 2 - Charitable Event

Use	Source	Number	Projected Flow (gpd)	Total Flow (gpd)
_	Full-time Employees	14	15	210
Winery	Part-time Employees	5	15	75
Ņ	Charitable Event Visitors (off-site caterer)	165	10	1650
	Peak Day Totals	184		1,935

## V. Conclusions

The existing on site sanitary waste water system has a documented capacity of 1,944 gpd.

The system has capacity for maximum daily staff, tasting visitors and a mid-size marketing event on the same day as shown in Table 1:

On-site Septic System Capacity 1,944 gpd > 1,940 gpd for tasting visitors & mid-size events.

This system also has capacity for charitable events with up 165 guests as shown in Table 2:

On –Site Septic System Capacity 1,944 gpd > 1,935 gpd for charitable events