Quartek

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Date: 07 Oct. 2025
Project No: 25024

Re: **Application for Zoning By-law Amendment**
File No. ZBA-09-2025
Konzelmann Winery
1096 Lakeshore Road, Niagara-on-the-Lake, ON

Sewage Flows from Proposed Special Events

The owner of the above noted facility is applying for a site specific Zoning By-law Amendment (ZBA) to allow for the hosting of outdoor events in the space near the lakeshore in the northern portion of the property. These events are expected to have 50 to 200 guests attending.

Background:

We understand from the owners that such events have already been taking place under Special Event Permits issued by the Town of Niagara-on-the-Lake (NOTL), but the Town has requested the owners to go through the ZBA process.

We understand the following:

- Events are held between May and September, with about 25-30 events per year
- Most events are less than 50 people and run for about 2 hours
- Guests have been using the existing washroom facilities in the hospitality area
- There is no intention to increase the number of events
- Based on annual review reports, it appears that the actual sewage flows from the hospitality area have been well within the rated capacity of the existing sewage system

Impact on Sewage Flows:

Based on the Amended Environmental Compliance Approval, dated 24 Oct. 2018, the rated capacity of the Septic System SS-2 for the Hospitality Area is given as 4,920 litres per day.

Based on the latest Annual Performance Report for May 2024 to April 2025, prepared by WSP Canada Inc., the average daily flows for this system, calculated weekly, ranged from 1,043 L/day to 3,857 L/day during that period (see Section 3.5.2 in the report). This shows that the maximum recorded flow is well under the rated capacity for the system, leaving a surplus capacity of approximately 1,063 L/day over the maximum flow recorded in the previous year. A review of the historical water usage data in Table 5 of the report shows that this value of 3,857 L/day was exceeded only once during the previous 8 years, and therefore it is deemed to be a reasonable value to be used as the high end of existing flow rates for the SS-2 system.

As mentioned above, events were happening during this period in the subject event area, and we can assume that these events included up to 50 guests, which would be included in the existing flow data.

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Based on Table 8.2.1.3.B in the Ontario Building Code, the recommended design sewage flow for an assembly area with no food service is 8 L/person/day. Therefore, the surplus capacity calculated above would allow for an additional 132 persons (1,063 L/day divided by 8 L/person/day) to be accommodated. Adding this to the 50 people already included in the existing flows, allows for a total of 182 people to be accommodated in the events area, subject to any other simultaneous activity in the Hospitality/Office Area. This calculation assumes typical simultaneous events that would have been happening in the past. If other simultaneous activity is restricted during the event, then the above allowance for the event could be increased accordingly. For example, if office staff is reduced by 2 people for the day of the event, the number of event guests could be increased to 200 people (based on OBC allowance of 75 L/day/employee).

Recommendations:

Based on the above, we recommend one of the following:

1. With the continuation of typical activities in the Hospitality/Office Area, events including up to 182 guests can be accommodated within the capacity of the existing septic system SS-2. For higher numbers of guests, portable washroom facilities should be provided.

2. If appropriate reduction of other uses in the Hospitality/Office Area on the day of the event can be demonstrated to account for a reduction of at least 144 L/day in sewage flow, then 200 guests can be accommodated in the event area, using the existing facilities in the hospitality area.

Prepared by:

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