

Thermëa spa village | Whitby: Audit Complete

In our 20 years of operation, we have never had an incident like this in any of our pools, and it is our intention to never have an incident like this again.

As a wellness creator, the health and safety of our guests is our most important priority. It is our commitment to make this right and ensure the public can trust us again.

Since October 14th, we have been leading a comprehensive audit to understand what happened in the Källa pool. This extensive audit was overseen by the corporate team at Groupe Nordik, our pool builder and designer, as well as our most trusted consultants who have helped Groupe Nordik become an industry leader over the last two decades.

We have also consulted with Dr. Roy Vore, a microbial physiologist specializing in recreational water illnesses and the Chairman of the Sanitation and Regulation Committee for the Floatation Tank Association.

What we found

- Prior to opening, all nine pools at the Thermëa spa village in Whitby were prepared for inspection based on the requirements of the Ontario Provincial Health Code.
- Following the opening inspections by the Durham Public Health Department, all nine pools, including the Källa pool, met regulations and were opened on October 5th, 2022.
- On October 14th, we were informed by the Durham Public Health that pseudomonas and staphylococcus (or staph) bacteria were found in the Källa pool.
- Out of an abundance of caution, Groupe Nordik closed all pools at our facility even though these issues were isolated to the Källa pool.
- Similar conditions were never found in the other eight outdoor pools.

At the conclusion of our audit, we found three factors that contributed to the bacteria being found in the Källa pool.

One:

- The Källa pool's primary disinfection system was a bromine erosion system, which feeds the sanitization chemical into the pool. In Ontario, all pools must be treated with either bromine or chlorine. Bromine was selected because it was understood to be an effective chemical treatment in warmer temperatures and less irritating to bathers than chlorine.
- Our standard operating procedure requires a manual test of each pool every two hours. When we launched, all tests indicated that bromine was being released at the appropriate levels.
- According to our audit, however, a valve on the bromine erosion system failed sometime after launch. This impacted the amount of bromine being released into the pool. We have not been able to determine yet if this was due to a manufacturing defect, installation error or some other cause.
- As part of the initial solution, we replaced the valve on the bromine erosion system and installed a redundant bromine system as an additional backup.

Two:

- The Källa pool also came with an ultraviolet disinfectant system, which functions as a secondary safety measure, to destroy any bacteria that escapes the bromine. Our audit found a 'flow switch' malfunction, which caused the ultraviolet system to fall into maintenance mode and not serve its primary function.
- As part of the solution, we proceeded to replace the flow switch on the ultraviolet valve system.

Three:

- Further testing indicated that the highly concentrated solution of salt (14%) in the Källa pool impacted the bromine puck's ability to dissolve in the water, therefore the bromine was not acting as a complete chemical barrier to the bacteria, as we had been advised it would.
- All other pools at Thermëa spa village in Whitby (and across Canada) operate with chlorine. Injection valves and chemicals for the other pools in Whitby have been carefully examined and there are no irregularities.

Our Action Plan and Enhanced Safety Measures

- On the advice of Dr. Vore and the entire audit team, the sanitizing system for the Källa pool will be converted to chlorine.
- According to Dr. Vore's research and experience, and others, chlorine is a proven effective chemical for sanitizing the saltwater Källa pool.
- The Källa pool and all related systems are being completely drained, sanitized, and re-assembled to allow for the use of liquid chlorine, which does not need to dissolve.

The corporate team at Groupe Nordik will be introducing new safety protocols that exceed anything required by health bodies provincially, and across North America.

1. Installing two chlorine sanitizing systems, one as a secondary backup system. This will reduce the likelihood or impact of mechanical failure and ensure that chlorine will always be present in the pool.
 2. Upon re-commissioning, the Källa pool will be charged with 28% Epsom salts, effectively doubling the salt content in the water. This higher concentration of salt will serve as an additional inhibiting agent for bacteria. The combination of higher salt and chlorine will ensure our guests will always be safe while maintaining a therapeutic experience.
 3. We have installed an alarm on the ultraviolet (UV) disinfection system to immediately alert pool operators if there is a disruption and trigger immediate action if there is ever a problem.
 4. To support our new protocols, we will be installing a laboratory grade incubator for bacteria testing.
- Having an incubator on site will allow our team to perform regular, proactive bacterial tests in line with the standards of a drinking water testing facility. From our understanding, we will be the only recreational swimming pool facility in Canada with this capability on site and one of a select few in North America.
 - Our water testing plan will include proactively testing for bacteria and a multitude of other parameters on a regular basis. This measure is completely voluntary and not a requirement of any public body, though we feel it is a critical step in regaining the public's trust.
 - The Ministry of Health will still be able to test our water for bacteria as usual.

Our system will serve as an additional safeguard, not a replacement to the province.

After extensive testing by our entire audit team, we conclude with 100% certainty that we will, in time, be able to reopen the Källa pool and offer a safe experience for all of our guests.

- All other pools have always been safe and were only closed by Groupe Nordik out of an abundance of caution.
- As we have expressed, the situation in Whitby is the greatest challenge Groupe Nordik has faced in our two decades of operation. As wellness creators, our primary mission is to make a difference in people's lives by developing spas that are in harmony with nature and creating unique experiences that support the physical and mental health of our guests.
- We are committed to rebuilding trust with the public, and it begins by doing everything we can to ensure our guests are safe and can continue to enjoy the therapeutic benefits of our pools.

Groupe Nordik is committed to transparency throughout this process. Posting the results of our audit is the first step towards fulfilling that commitment. But it is only a first step. We will continue to update this page whenever we learn new information about the components involved. We will begin contacting impacted guests today to share the results of our audit firsthand and offer our support. Our team is working hard to implement the changes we have outlined above, introducing a new, unprecedented level of safety for pools in North America.

Stay tuned for more information related to the re-opening of our outdoor pools, as well as the improvements and re-opening of the Källa pool over the coming weeks and months.