# PENINSULA HOT SPRINGS - A DEVELOPERS STORY

Charles Davidson, Peninsula Hot Springs, Victoria, Australia



Main Pool.

## **INTRODUCTION**

In the gold rush state of Victoria, there's a new rare find: liquid gold. It's pretty much a given that you'll find hot mineral springs in relatively young lands of vaulting, geological upheaval like New Zealand, Alaska, and Japan. But in the ancient, stable rock strata of the Great Southern Land, it is thought a rare find, truly liquid gold.

The Australian state of Victoria was the destination for waves of gold miners in the 1850's Californians, British, Irish and Chinese among them seeking their fortunes with pick and shovel. In February 2002, Victoria's ground again yielded excitement, when Melbourne television news stations captured the moment that hot mineral water gushed from a 2,090 feet (637m) bore at Rye on the Mornington Peninsula, about one hour's drive south of Melbourne.

The sight of the 122°F (50°C) geyser was a hugely satisfying waypoint on a fascinating journey for Charles Davidson and his brother Richard. The brothers still meet with incredulous hydrologists and geologists from younger lands amazed that they have tapped a natural hot water spring in a country where 'mountains' are more akin to the old weathered molars of some ancient, tired beast.

In fact, Japanese hydrology experts went so far as to say 'no way' to Charles when he first began to investigate spa culture and bathing, with dreams of returning from his job in Japan to build a natural hot spring center at home.

Opening on 28 June, 2006 with brothers Norm and Bruce Cleland joining the Davidson brothers, Peninsula Hot Springs is a facility employing 75 people by tapping 122°F (50°C) geothermal waters from an aquifer 2,090 feet (637m) below the 42 acre (17 hectare) Mornington Peninsula prop-



Richard and Charlie Davidson.

erty. It is the first hot spring bathing facility in Victoria, and the only one in Australia to integrate therapeutic spa, bathing, accommodation, food and beverages. The facility includes public and private hot spring baths, a massage spa center, relaxation rooms, café and juice bar, gift shop and a booking office for activities and accommodation.

## THE LEARNING EXPERIENCE

The inspiration for the project began when Charles visited several hot springs while in Japan in 1992, working for Mitsubishi Corporation. This sparked off several years of touring and studying hot springs around the world.

In May 1997, Charles heard a rumor that hot geothermal water had been discovered on the Mornington Peninsula in 1979, and a search of Department of Minerals and Energy records substantiated it.

Melbourne is a wonderfully multi-cultural city, having the benefit of various waves of immigration throughout its history.

Similarly, Peninsula Hot Springs could be said to reflect a multi-cultural bathing experience with the benefit of Charles Davidson's worldwide research into hot springs and spas. In his research, Charles visited spas in Japan, China, Europe, Yemen, Egypt and Turkey. He talked with spa experts in Russia, the United States and Canada. In Japan, at a visit to Daimaru Hot Springs, he met Professor Sato, Chairman of the Organization for the Preservation of Japanese Hot Springs, who taught him the sustainable nature of the business.

For 1500 years the Sato family had been operating the Daimaru Hot Springs Inn, where they provided rest, food, shelter, and a hot bath to travelers before they set out on the trek through the high, snow covered mountain pass from Kyo-to to Tokyo.

The modern day concept of needing to continually grow and expand had been surpassed by the desire to serve and to exist in harmony with the environment. A harmony with nature seemed to be their key to longevity.

Based on an introduction by John Lund after a visit to his home in Klamath Falls, Charles met with Dr. Vladimir Adilov, Principal of the Russian Mineral Authority, who in turn introduced him to several geothermal experts, including Nikolai Strozhenko, Vice Minister of Tourism in Russian and President of the Russian Spa Federation. Mr. Strozhenko had a photo on his office wall with him and Boris Yeltsin arm in arm at a health retreat at the Black Sea, confirming their belief in the healing powers of bath in Russia.

Charles also undertook a two week spa education course in Karlovy Vary (Karlsbad) in Czechoslovakia (1998) now the Czech Republic, coordinated by Dr. John Paul De Vierville, the Education Director of the International Spa Association (ISPA).

The link between the medical profession and the spa industry was almost total, as in then Czechoslovakia, all medical doctors were required to study balneology (the use of water in health and healing) as an element of their undergraduate training. Spa programs were prepared and coordinated by medical doctors. As in much of Europe, the spa is integral to national health programs and plays a vital role in the health and wellbeing of its citizens. Charles' next stop was to Yemen, as he wanted to prove a theory that all cultures with hot springs would have bathing as an element of their living ritual, no matter their economic state. As it turned out, the Arabic way of the bath in this one of the world's poorest countries, like the culture itself, proved itself to be incredibly developed and sophisticated. In Sanah, the capital of Yemen, there were 17 public baths, one of which was 2,200 years old and still operating. While none of the city baths were fed by hot springs, he was able to visit three natural hot springs within a few hours' drive from the capital. The Arabian bathing culture saw women and men allocated separate times to bath and at all times bathing costumes were worn.



Charlie in Yemen.

Later in 1998, Charles visited "New World" baths in Canada and the United States, as the day spa boom was starting to gain momentum in these countries. Major cosmetic companies and their branded retail muds, oils, creams, and lotions were part of this growing economy.

The conclusions of his observations were that hot spring spas could be categorized into three types:

(1) the European medical spas, (2) the Asian nature-based relaxation spas, and (3) the American beauty spas.

Medical spas provide programs that follow a prescribed health routine including elements of outdoor exercise and drinking the waters for their mineral benefits. Relaxation spas draw people out into the environment where contemplation, reflection and calm are to be found. Beauty spas tickle and pamper the mind, body and spirit while driving home a branded retail product sales pitch.

#### THE PLANNING

After traveling to 45 countries and researching spas in 15, Charles has seen the diversity and possibilities of bath life. The simplicity of the bathing experience in thermal water and the relaxing sound of "aaaaaahhhhhh!" as you immerse yourself into the warm water was the central experience. Back in Australia, Richard worked on the land and the planning application. Through 1998 and 1999 Richard oversaw the planting of 7,000 indigenous trees on the Mornington Peninsula property. The number has since grown to more than 20,000 plantings. Having a Masters Degree in Environmental Science, Richard shared Charlie's vision of a center that worked with its local environment enhancing, but not dominating it. The brothers felt that a bath in nature, at Peninsula Hot Springs, would have to be one in the nature of their Mornington Peninsula land and one that shares with their customers the peaceful and gentle world knowledge of the bath.

The brothers wanted time in the outdoor baths to be a 'timeless zone' where birds come to visit, and at night inquisitive possums would walk through the trees above the bath under the southern stars. They envisioned an experience that would transform people from their busy world into a place where a connection with nature can be found. "The realization that we are part of the universe and not separated from it will provide a sense of connection and self. Visitors to this place will not know the passage of time and will almost forget to leave," Charles wrote for a spa association paper before the center was completed.



Small soaking pool.

## THE CONSTRUCTION

Award winning Australian architects, Gregory Burgess Architects, brought their extensive experience with the Australian environment and in particular indigenous Aboriginal connections translating to the project a living cultural experience. They worked closely with Taylor Cullity and Lethlean, Landscape Architects to design the building, pools and surrounding landscape. Hot, warm and cold baths, steam rooms and saunas along with indoor and outdoor mineral baths in both private and public configurations were made available.

This, coupled with features gleaned from overseas, provided a diversity of cultural bathing experiences with quiet spaces and tranquil places for discovery and creativity.



Small soaking pool.

In addition the buildings are heated with the geothermal waters, and a greenhouse and fish farm will also be developed to provide a living example of what is possible with geothermal waters. These will be complemented with a Center for "Geothermal and Environmental Demonstration and Education" that will share the knowledge gained with many people with an interest in what the Peninsula Hot Springs trio have learned along the way.

With the Mornington Peninsula recently receiving UNES-CO accreditation as the world's first "Urban Biosphere", education on the possibilities of a sustainable future is more than a responsible activity, it is a community expectation. The thermal waters flow from Selwyn Fault and out into Bass Strait. Ten thousand years ago, when it was possible to walk from the present day Mornington Peninsula to Tasmania, one was greeted with the joy of natural hot spring pools along the way. With the rising of the waters the natural springs are now found under the ocean where they form their own micro climates of warm, fresh water zones. The only way to reach the thermal waters was to bore down. The drilling program started in late 1998, and after several failures, was completed in 2002. The final bore was drilled to a depth of 2,090 feet (637m) through a variety of sands, limestone, marls, brown and black coal, and finally to a basalt basin. The bore has a capacity of (872 gpm (55 l/s)) producing 122°F (50°C) geothermal waters. The water has a total dissolved solids (TDS) content of 3200 mg/l (ppm) and a pH of 7.09. It is classified as sodium chloride bicarbonate water and also contains 95 mg/l magnesium, 81 mg/l potassium and a wide variety of other minerals and trace elements. The water rises under its own pressure to a depth of 29 feet (9m) from the bore head, which is approximately 60 feet (18m) above sea level.

Future plans will see an expansion of the pools and spa center, construction of 180 rooms of accommodation, a wellness center spa, as well as a wellness school, and a variety of satellite spas with country themes including Maori from New Zealand, Japanese, Arabic and Indian. The facility seeks to be fully sustainable with an underpinning belief of treading lightly. It has an egalitarian philosophy offering an experience that is available to and welcomes everyone.



Well and heat exchangers.

## CONCLUSIONS

John Lund and his family were guests at Peninsula Hot Springs in July 2007, and spent an evening soaking in the various pools and tubs. Relaxing under the stars and the Southern Cross, they were able to understand Charles' dream and goal to provide "bathing in nature". We were also privileged to be entertained by a local musician and sample the wonderful food prepared by Charlie's chef-in-residence. Charlie's 75 full-time and part-time employees were like one big family, all having pride in the spas' operation. "We have visited and dipped in many hot springs throughout the world, but this was one of the best", commented John.

#### REFERENCES

Davidson, Charles, 2003. *Peninsula Hot Springs: Biography* of an Australian Hot Springs, presented at the United National World Health Organization, 1st FEMTEC Asia Hot Springs Conference, Taiwan, December 13-19, 2003.

Literature from Peninsula Hot Springs: www.peninsulahotsprings.com email: relax@peninsulahotsprings.com phone: (61) 03-5950-8777



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