## Ashes to ashes

By David Carrigg, Staff writer Vancouver Courier

The six-foot-long container is made of pressed wood, lined to prevent leakage, and rests on a stainless-steel trolley. Two attendants push the trolley from the storage room in the southwest section of the Vancouver Crematorium at Mountain View Cemetery into the cremation room, where two gas-fired "cinerators," as they're called, sit side by side.

The pair line the trolley up with an automatic conveyor at the mouth of one cinerator, its heavily insulated door already open, then gently transfer the box onto the conveyor to the hearth inside the rectangular machine.

On the right-hand wall of the cinerator are a series of control dials, including one showing the temperature up to a maximum of 1,200 degrees Celsius and another that starts the burning process.

When the lead attendant turns the dial, the overhead gas-fired jets blast flames onto the box until it burns away, then onto the body, which also ignites, fuelled by fat inside. Superheated air is blasted underneath the hearth to ensure as even a burn as possible.

Material lining the cinerator, designed like a kiln, ensures a constant temperature of around 1,000 degrees Celsius-enough to break the human body down into four to eight pounds of bone fragments and ash over the next three hours.

When the process is complete, the attendants use a long-handled metal brush to push the remains from the front of the hearth to the back, where they fall into a catch basin.

The remains are then scanned with a magnet for metal fragments, like hip or knee joints, that need to be removed and disposed of. Dental gold and silver evaporate during the process.

What's left goes into a processor that cuts through bone fragments, producing a coarse, light grey sand that's wrapped up in a small cardboard box and presented directly to the family, or transferred into an urn before being handed over.

As soon as the job is complete, the attendants bring in another container, and the process is repeated. Each of the two machines will cremate between three and four bodies a day, for a total of 2,000 a year, stopping only for servicing, or when the attendants leave at night.

North American Cremation Association statistics show Vancouver has the highest cremation rate of any city in North America-about 80 per cent-while B.C. tops any other Canadian province or American state at about 76 per cent.

While surveys show the general trend toward cremation throughout North America is cost-driven, several theories explain why Vancouver tops North American cities, ranging from the city's transient population to its citizens' high level of environmental sensitivity.

To meet the increasing demand, the city-owned Mountain View Cemetery is basing its own resurrection on an innovative plan to create 7,500 spaces for cremated remains within the cemetery's historic Masonic section.

The first crematorium ever built in Western Canada is housed in a 91-year-old pink art-deco building visible from 41st Avenue, looking north, between Prince Edward and Fraser streets. Since it was built in 1912 by the Cremation Association of B.C., at a time when Vancouver's cremation rate was about two per cent, it's changed hands several times. It was sold in 1916 to the Simpson family, which operated the facility until the mid-1980s, when it was bought by the Loewen chain of funeral homes, later taken over by its current owner, the Alderwoods funeral chain, in 1998.

Aaron Morrison, manager of Vancouver Memorial Services and Crematorium, looks more like an accountant than a funeral director and certified embalmer. The 33-year-old wears a black-and-white check jacket, a blue tie secured to his shirt with a gold pin, and has glasses and short curly blond hair. His skin is pale, with a light purple touch from the sunlight pouring though similarly coloured blinds covering the meeting room window.

Morrison got into the funeral industry by working part time for a local funeral director, while completing a Bachelor of Arts at Simon Fraser University. He took the job because he could work at nights and weekends and the money was decent.

While studying, he was trained in the most menial tasks of a funeral home worker, such as cleaning, before graduating to more important jobs, such as collecting bodies from homes or hospitals.

He found he had an aptitude for working with families. So, when he graduated with a history degree, he decided to pursue work in the funeral industry full time and completed an embalming course and a two-year funeral director program at BCIT.

"It's a unique job and can be stressful but I'm able to help families deal with loss. It's not like being a counsellor, but it's an important job, giving people options for their family members' remains."

Morrison's friends have now tired of making jokes about his job and he makes a point of doing plenty of after-work activity-including boxing, mountain biking and surfing-to help clear his mind of what can at times be a very sombre job.

Morrison's continued interest in history is evident when he talks about his own workplace, set inside the city-owned 106-acre cemetery.

Originally, he says, the two crematoria were oil-fired and took a good eight hours to cremate the body. During the first year of operation, the crematoria consumed about 60 bodies. "Now we do about 2,000 a year and are at capacity."

Morrison said cinerator technology has improved dramatically over the last two decades, driven by the need to reduce emissions as well as the length of the process. Natural gas has replaced oil or coal-burning cinerators and air pumps are now used to circulate hot air within the chamber to speed up the cremation.

Cremation became legal in Canada in the early 1900s, and was bolstered in 1966, when the Catholic Church ruled it was acceptable, as long as the urn ends up in a cemetery.

Morrison said Canada's steadily increasing cremation rate is driven primarily by cost-traditional funerals are considered to be the third largest purchase the average person makes, behind a home and vehicle.

The most basic cremation-using a cardboard cremation box and cardboard urn with no service or commemoration-costs about \$400, while the most basic coffin burial can set a family back about \$5,000, not including the cost of the plot, which can range from \$1,000 to \$4,000.

Urns on sale at Vancouver Crematorium range in price from \$60 for a plastic, silver-coloured container, to \$3,000 for a bronze sculpture, with a soaring eagle atop a mountain, a lake below, and fish set in plastic water.

Morrison believes Vancouver's cremation rate is particularly high, in part, because of the transient nature of its population-many city residents weren't born here.

"If you don't have a tie to a certain area, you may not want to be buried there. People like to have something to focus on, a memorial wall or a cemetery, but if a family is moving from place to place, it may not be necessary to have that."

The fact there are no burial plots left in Mountain View Cemetery, which has been full since 1986, also encourages cremation. About 120 people are still buried in the cemetery each year, but all in plots purchased prior to 1986.

Erik Lees, Glen Hodges and Arnold McEwen stand next to a disused cast-iron fountain that was once a memorial in the Masonic section of Mountain View, when Masons were responsible for maintaining the 10-acre parcel at the southernmost part of the cemetery.

The Masons handed control of the lot to the city in 1985, when it was full and another Masonic cemetery had been created in Burnaby.

McEwen, the cemetery foreman, said the fountain fell into disrepair several years before he started working at the site in the 1970s. He thinks it was so heavily vandalized, the Masons simply stopped repairing it.

Hodges, the cemetery manager, and Lees, a city contractor, are looking over the Masonic Neighbourhood Redevelopment Plan, discussing ways to turn the old fountain into a "chamber of reflection" on a cherry-tree lined path, with family and community columbaria on either side.

Hodges kicks at a mound of dirt alongside the path. Underneath the mound is a piece of marble, about six feet long and six inches high, that was covered about 20 years ago to make it easier for cemetery staff to get their lawn mowers onto the site.

It was around that time cemetery management also decided to lay flat as many headstones as possible to make it easier for staff to mow the enormous tracts of grass within the 106-acre property.

About 80 per cent of the headstones were laid flat-the only ones spared were at the request of families. The result, says Hodges, who was employed by the city two years ago to revitalize the cemetery, is a very sterile cemetery.

"It is not very inviting for people to come, whether it be to reflect on a passed family member, or simply to just enjoy the serenity of the space." Since plot sales came to an end in 1986, the cemetery has had almost no income, and as a result, costs Vancouver ratepayers about \$750,000 a year to maintain.

Hodges walks along the road to the Kelly mausoleum, one of just two mausoleums in the cemetery. The other, about 100 metres away, contains the remains of former B.C. Lieutenant Governor Eric Hamber.

Hodges points out the stages of infill the cemetery has experienced over the years. At first, it was along the paths that once connected each grave site, followed by the land between the road and existing gravesites, which contain hundreds of cremated ashes from the 1970s and early 1980s. The cemetery now contains the remains of about 145,000 people, of which 14,000 have been cremated.

Initial estimates on the number of gravesites that could be reclaimed by the cemetery and the number of cremated remains that could be accommodated turned out to have been overstated in a 2000 master plan.

For a pre-purchased grave site to be reclaimed, the owner must have purchased the plot more than 50 years ago, be over 90 years of age, and be uncontactable. The original plan estimated there were 4,000 potentially reclaimable lots, though that has been scaled back to 1,000. The initial 100,000 figure for cremated remains has also been scaled back to a pilot project containing 7,500 places for cremated ashes to be deposited, all in the Masonic section.

Lees, a consultant employed by the city to revise the master plan, has come up with a series of options for cremated remains, including dozens of concrete columbaria-each able to hold 24 urns behind a sealed waterproof facade-family urns in which the ashes of deceased family members are continually placed in a large reinforced concrete urn, and memorial walls, where individuals can be remembered through plaques, though their remains are scattered elsewhere.

The cost for the project is estimated at \$3 million, which would be recouped through sales of those spaces.

Lees points out that plenty of burial plots are still available in North Vancouver, Burnaby, New Westminster and throughout the Fraser Valley, dismissing Morrison's suggestion that the cremation rate is so high in Vancouver because of lack of burial space.

He points instead to a shift away from organized religion, which traditionally dictated a church service and burial.

"Lack of space is not the driver. Ties to religion and traditions of religion have fallen away dramatically, especially on the West Coast, where for many of us, getting into the mountains is as good as going to church. They become the important places in our lives. That's where people scatter remains, be it Aunt Helen's favourite fishing hole or the mountains," says Lees, whose expertise was originally in park management.

A 1999 study by the North American Cremation Association, whose members include cemeteries, crematoria, industry suppliers and consultants, found 24 per cent of cremations were driven by cost, 17 per cent by concern for the environment, 13 per cent by a desire for simplicity and four per cent because the family could scatter remains.

Lees believes the next evolution for the dead will be green burials, which have already caught on in Europe. In Sweden, for example, bodies can be immersed in liquid nitrogen, which breaks them down, producing about 30 kilograms of organic matter. That matter is then placed in an easily biodegradable coffin, which is buried in a communal burial garden and effectively becomes nitrogen-rich fertilizer.

Lees said the new movement is being driven by the realization that cremations are not pollution free. The process consumes the equivalent of 180 litres of gasoline and releases lead, mercury, selenium and other dioxins into the atmosphere.

The Memorial Society of B.C. is now promoting two of the three levels of green burials established in Europe. The first level is the least expensive and involves no embalming, a biodegradable coffin and no grave liner. The second level involves planting a tree alongside the grave. The third is interment in a burial park, which is a forested setting planted atop graves, where the bodies are buried in easily biodegradable material. Burial parks exist in Europe, but not yet in Canada.

Hodges and Lee observe a Chinese family walking out of the Vancouver Crematorium, after collecting their relative's ashes in a beautiful blue floral urn, which the youngest female in the group clutches tightly to her chest. The group climbs into a rented vehicle and leaves to take the urn home, to another cemetery, or to a place where the ashes can be scattered.

It's those kinds of mourners the two hope to entice into the cemetery, once the revised master plan is presented to council in January, and ultimately approved.

"What has happened is people see Mountain View as an old cemetery,

rarely used and rundown," says Lees. "We want to change that, turn it

into what will be a model for other cemeteries in B.C. We are only just starting to appreciate what the cremation trend means in Vancouver.

There's a lot of opportunity here."

