



RESTROOM ASSOCIATION (SINGAPORE)

26, ubi road 4 Singapore 408613

telefax:68412891

telephone:68411621

website: www.toilet.org.sg

www.worldtoilet.org

RESTROOM ASSOCIATION (SINGAPORE) NEWSLETTER – July 2004

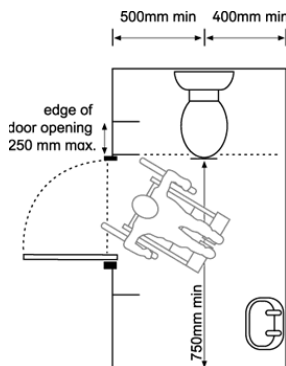
Content:

1. Design for the Restroom Industry
2. News Bite
 - City aviation execs get to clean toilets for a day
 - Public offered more toilets in Beijing
 - Bringing relief with the pee-Pod
3. Looking Beyond the Wash Basin
4. Last Words

Design for the Restroom Industry

“A Guide To Better Public Toilet Design and Maintenance” is a free guide that is available to anyone (http://www.nea.gov.sg/cms/ehd/public_toilet_guide.pdf)

This was one of the efforts that RAS and NEA had done to promote well-designed and clean public toilets. With more than 29,000 public toilets, there is much more to be done. Another industry effort is the development of skills standards in the Design of Restrooms.



Why Design of Restrooms? Awareness for cleaner toilets and better toilet hygiene & etiquette has been growing, no less with the concerted effort of the government, community and individuals.

However, there is still much work to be done, considering the ethnic and economic diversity that Singapore possesses. As more cultures come together, understanding each other becomes more important, given the close proximity we are living with each other. Needless to say, gender and age are also factors.

Technology and productivity gains have grown in leaps & bounds, and this is reflected in the infrastructure or ‘hardware’ that supports it. While all these sounds like an economic report, an analogy is drawn to compare the different cultures or ‘software’ that is becoming integrated. One size doesn’t fit all.

Culture & Gender



In other words, everyday in Singapore, the expatriate from Indonesia, or the heartlander, or the Shenton Way type yuppie would have different usage, attitudes and demands on what is a clean toilet, and how to aptly use it their 'own' way. The 'hardware' remained the same, but 'software demands' is diversified, compared to say, five years ago.

RAS is dedicated to promoting the design and functionality of public toilets with the users needs in mind. For example, the toilet needs of a man are different from a woman, a child, an elderly person and different kinds of physically disadvantaged people. Furthermore, cultural differences also have to be taken into account, especially in view of rapid globalisation.

Design has an impact in Cleanliness and Comfort

The RAS goes beyond the basic toilet needs such as providing soap, a hand dryer and toilet paper. It looks at cleanliness, how the toilets are designed and what facilities are provided.



Good public toilets are designed from the outset to meet specific user needs, be it a woman, a child, an elderly person and those with physical disadvantages. All parents need clean baby changing facilities when shopping or when patronising restaurants and hotels. But, not all establishments provide such facilities.

There is a need to develop a set of standards and guidelines for public toilet owners and managers based on the key principles of hygiene, design and usability.

Raising the Standards

RAS aims meet these needs on how to have well-designed and well-maintained toilets to accommodate these needs.

- ❑ There is a need to design of the toilets with the users needs in mind. Toilets must cater for children, disabled people, the elderly and mothers;
- ❑ Toilets need to be constructed for the right environment, be it office toilets, coffee shops or hotels. Wet and dry areas also need to be taken into account;
- ❑ Managers, owners and the general pubic need to be educated in how to identify maintenance issues and find the best possible solution to solve them, in order to upkeep the toilets

NSRS in Design of Restroom



The National Skills Recognition System (NSRS) is a national framework for establishing work performance standards, identifying job competencies and certifying skills acquisition. This system provides companies with a strategy for ensuring the quality delivery of their goods and services, sustaining international competitiveness and creating the future for the organisation as well as its people.

The program is targeted at Architects, Interior Designers, Facility & Maintenance Managers, toilet owners and contractors who build public access toilets.

Working with the Workforce Development Agency (WDA), it will also position Singapore as the forerunner and leader of toilet design. Currently, RAS and WDA are working towards the implementation of NSRS toilet design and development of Performance Standards for the restroom industry. For example, Design of Female Restrooms for Coffee Shops; Design of Male Restroom for Industrial Building; Design of Handicapped, Family & Children Restroom for Shopping Complexes and Identify Maintenance Work of Restrooms.

News Bites

[City aviation execs get to clean toilets for a day, Associated Press](#)



CHICAGO - The head of Chicago's Aviation Department says even executives should be willing to get their hands dirty.

So, Commissioner John Roberson is handing his top deputies gloves and mops and ordering them to spend the day cleaning toilets at O'Hare International Airport.

Roberson says clean restrooms make a big impression on travelers who come through Chicago.

That means that -- beginning this week -- anyone with a title of assistant commissioner or above will spend an eight-hour shift cleaning toilets and mopping floors.

About 20 executives -- including Roberson -- are on the hook for janitor duty. And many of them make more than 100-thousand dollars a year.

Public offered more toilets in Beijing
www.chinaview.cn, 2004-07-21 10:11:57

BEIJING, July 21 (Xinhuanet) -- More than 3,000 Beijing business and entertainment spots will open their toilets for public use.

The Beijing Municipal Administration Commission has urged hotels, restaurants, shopping malls, petroleum stations and many other establishments to allow the public to begin using their toilets by Monday, reported Wednesday's China Daily.

According to the Beijing Star Daily, the city also has promised that as of 2008, pedestrians will be able to locate a public lavatory within eight minutes in the downtown area.

Before, Beijing -- with a 13.8 million population by last's year count -- had only an estimated 7,700 public toilets.

The relatively few facilities simply could not meet the needs of the public.

A taxi driver surnamed Yang told China Daily that he is afraid of drinking too much water when he works, because he often cannot find a restroom.

"Each time I'm thirsty, I only dare to take a sip of water," said the 32-year-old man who usually works more than 12 hours in a typical day.

Wang also said that some drivers fail to contain themselves and use the roadside as their restroom out of necessity.

According to the commission's blueprint, the city will close about 3,000 toilets along lanes and single-storey house areas in the next four years.

The move to increase the number of facilities is seen as eliminating pressure from the host city of the 2008 Olympic Games and addressing the shortage of facilities.

A report from Xinhua News Agency hailed the move, noting that city tourists will be the biggest beneficiaries.

In the past seven-day May Day Holiday alone, the capital saw more than 3.6 million tourists from home and abroad.

Second, by opening their own restrooms to the public, entertainment attractions can become more attractive.

Far-sighted business people will not refuse toilet users, said Xinhua.

Most consumers are selective, and if they are offered conveniences in the establishments, they might stay and spend money.

Last, Xinhua said the move will help ease the government's pressure.

The commission only encouraged the entertainment places to open their toilets and no tough measures will be imposed on those which refuse to open theirs.

Meanwhile, the city will upgrade or build another 400 public restrooms to meet citizens' demands.

Bringing relief with the pee-Pod



The trauma of dirty loos could be a thing of the past for users of pPod, a guide to the best and worst of public toilets for iPod owners.

The possibility of unpleasant odours, a lack of soap or paper, graffiti and absent attendants have the power to strike fear into the hearts of all but the sturdiest of visitors to public toilets.

The question of whether to hold on until a familiar, clean facility is reached, or to bite the bullet and gain immediate relief, is one which faces everyone at some point.

A possible solution is now being offered to iPod users, who could soon have the power to choose their loos with confidence.

A free interactive guide to public conveniences, appropriately called pPod, offers audio and text information on their whereabouts, opening hours, facilities and cleanliness.

'Lovely clean mirrors'

At present pPod users have access to 114 reviews of central London toilets, but its creators, Nykris, say it could be extended to other cities.

Company employees were sent out across the city to record their thoughts on the state of the capital's loos.

The happiest reviewer took a trip to Hyde Park and reported: "Plenty of hand washing facilities, lovely clean mirrors, each of the cubicles look very clean indeed and they've all got toilet paper.

"Fantastic. I can't fault it. Maybe it's because it's quite close to one of the Royal parks?"

Nykris managing director Philip Read adds: "The definite lowlight was Piccadilly Circus, which at lunchtime on the Wednesday we visited was closed."

Some of the 14 audio reviews come with accompanying sound tracks, including Handel's Water Music.

Gigs and clubs

The pPod makes use of the iPod's text facilities which, Mr Read says, are "under-exploited".

"It does audio extremely well, but given that it has a screen and it's easy to make interactive experiences with that, nobody really seems to be making the most of it."

Users download the program to their PC or Mac, and then put it on their iPod. They can search through areas alphabetically, and then access the text and audio entries from there.

"We're currently exploring other iPod-based services that could be developed, including an interactive audio guide to gigs and clubs - something that we think could be particularly attractive to iPod fans," said Mr Read.

Story from BBC NEWS, Published: 2004/07/23 11:07:22 GMT
http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/magazine/3919973.stm

Looking Beyond the Wash Basin

What goes beyond the restrooms? We start to think of WCs, wash basins, hand dryers and the dear auntie who keeps the toilet clean at all times. The players would be the property developer, designer, builder, facility manager, cleaning contractor, public health inspectors, and yes, the auntie that may sometimes collect 10 cents from you.

In an urban environment like Singapore, having water clean enough to drink to flush the toilet is an achievement that we should be proud of. To continue to keep high standards, we would have to thank players like Public Utility Board (PUB) who is responsible for the 'back-end' operations of sanitation & sewage treatment.

NEWater



In February last year, Prime Minister Goh opened the first two NEWater plants at Bedok and Kranji, marking the beginning of water recycling as our 3rd national water tap. The first two national taps are: local catchments water and water from Johor.

Within a short period of one and a half years, they have established NEWater as an important source of water supply. Because it is cleaner and purer than even PUB tap water, it has become an attractive alternative water source for industry and commercial buildings that require ultra pure water. These include wafer

fabrication in the semiconductor sector, and cooling towers for air-conditioning in commercial buildings.

Today, PUB supplies a total of 12 mg of NEWater everyday to users located in Bedok, Tampines, Woodlands and Ang Mo Kio areas for direct non-potable use. PUB also pumps 3 mg of NEWater everyday into our reservoirs for mixing with rainwater, and further processing into PUB tap water.



With the opening of Seletar NEWater Factory recently, PUB have expanded the total NEWater supply capacity to 20mgd. This is equivalent to 36 Olympic size swimming pools. PUB is now able to serve NEWater to key customers located in the Serangoon and Ang Mo Kio areas - like ST Microelectronics, Seagate, Panasonic, Motorola and Nanyang Polytechnic.

The next step is to build the fourth factory at Ulu Pandan to supply NEWater to key industrial users in Jurong and Tuas, as well as commercial buildings in the Central Business District. PUB has already called the tender in April this year. When it is completed in 2006, the total production of NEWater will exceed 10% of Singapore's total daily water demands.

It started back in 1988

The Singapore Water Reclamation Study (NEWater Study) was initiated in 1998 as a joint initiative between the Public Utilities Board (PUB) and the Ministry of the Environment (ENV). The primary objective of the joint initiative was to determine the suitability of using NEWater as a source of raw water to supplement Singapore's water supply. NEWater is treated used water that has undergone stringent purification and treatment process using advanced dual-membrane (microfiltration and reverse osmosis) and ultraviolet technologies. NEWater could be mixed and blended with reservoir water and then undergo conventional water treatment to produce drinking water (a procedure known as Planned Indirect Potable Use or Planned IPU).

It is safe to use NEWater to supplement our water supply



NEWater is the high grade water produced after treated used water has been further purified using a 3-step process involving advanced membrane technologies like Microfiltration, Reverse Osmosis, and the final disinfection of the product water using ultraviolet light.

The multiple-barrier membrane treatment process has enabled the Public Utilities Board (PUB) to produce consistently good quality NEWater at the Bedok NEWater Factory.

With its consistently good quality and reliability in production, NEWater could be put to greater use in terms of being a source of non-potable water and for indirect potable use by blending it with reservoir water <http://www.pub.gov.sg/NEWater>

The Deep Tunnel Sewerage System



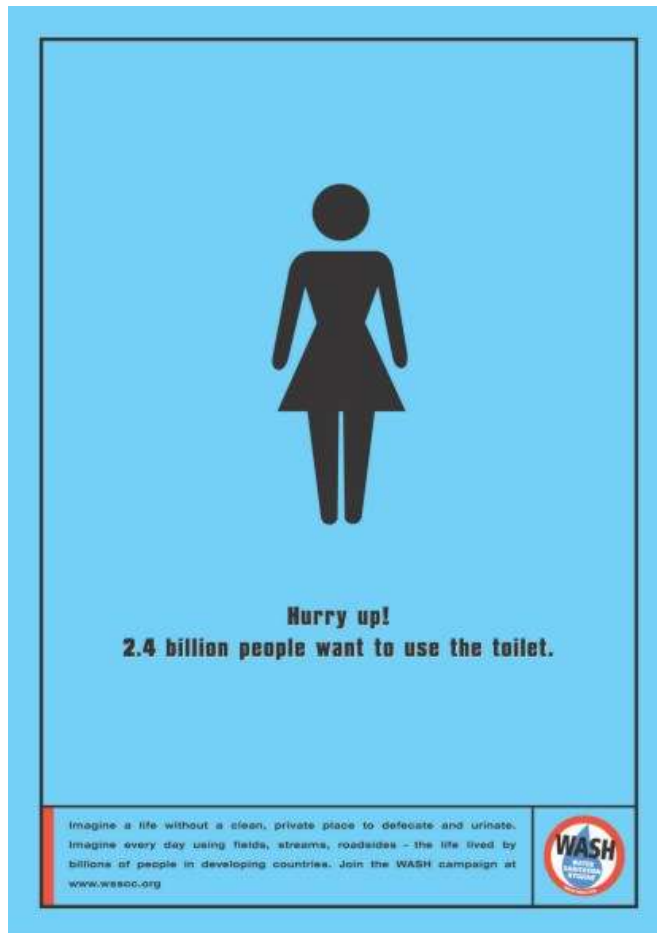
The Deep Tunnel Sewerage System (DTSS) was conceived as a long term solution to meet the needs for used water collection, treatment and disposal to serve the development of Singapore through the 21st Century. This long term project, which will be implemented in phases, consists of two large, deep tunnels crisscrossing the island, two centralised water reclamation plants, deep sea outfalls and a link-sewer network.

The 2 deep tunnels with diameters of up to 6 metres will be built at depths ranging from 20 to 60 metres below ground. A network of smaller link-sewers will also be built to link the existing network of sewers to the tunnels.

Used water from the existing sewers will flow into the deep tunnels via the link sewers. The deep tunnels will convey the used water to two new centralised water reclamation plants to be built on reclaimed land in Changi and Tuas. The treated effluent from the new treatment plants will be discharged through deep sea outfalls into the Straits Of Singapore. With the DTSS in place, the existing water reclamation plants and pumping stations, which are located all over the island, will be phased out eventually. For more information, visit <http://www.pub.gov.sg/deeptunnelseweragesystem.htm>

Last Words (a picture paints a thousand words)





Attend the WORLD TOILET SUMMIT 2004 from 17 to 19 November 2004

The 4th World Toilet Summit will be held in Beijing, China. The topics include *A global perspective on the relationship between Toilets and quality of life; world class tourism and toilets; social and economic returns in investments for Toilets; catering to the diversity of culture – toilets for different cultures etc.* International speakers on Tourism, Design, Maintenance and Environmental Sanitation will share their views on these and more. For more information, please visit www.worldtoilet.org