



19 November 2019

**RESTROOM ASSOCIATION (SINGAPORE) UNVEILS PLANS FOR HIGHER TOILET STANDARDS ON WORLD TOILET DAY**

*Adoption of Smart Solutions Introduced as a New Criterion for the Happy Toilet Programme*

1. At the eleventh LOO (Let's Observe Ourselves) Awards ceremony held at Heartbeat@Bedok to commemorate World Toilet Day (WTD), the Restroom Association (Singapore) or RAS supports Singapore's bid towards a smart nation by introducing the adoption of the holistic Detect, Feedback, Eliminate & Clean (DFEC) smart solutions (**Annex A**), as a new criterion for its Happy Toilet Programme (**Annex B**).
2. Currently, only 6-star toilets need to meet the criterion on the adoption of all four DFEC smart solutions to increase productivity and efficiency. With effect from 1 April next year, 4-star toilets will need to adopt at least one of the DFEC smart solutions while 5-star toilets will need to adopt at least two of the DFEC smart solutions. The assessment criteria of 3-star toilets will remain the same. The required scores for the respective star-ratings will also remain the same. These revised criteria will not only encourage the adoption of smart solutions but most importantly translate to better productivity and efficiency in toilet maintenance.
3. During the award ceremony, Guest-of-Honour Dr Amy Khor, Senior Minister of State for the Environment and Water Resources presents the LOO Awards to a total of 42 recipients (**Annex C**). The recipients include preschools and schools.

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## **About Restroom Association (Singapore)**

*The vision of the Restroom Association (Singapore) or RAS is A Gracious Society Embracing Excellence in Restroom Culture. Started in 1998 as a non-profit organisation, RAS is dedicated to building an excellent restroom culture by actively engaging owners, the cleaning industry and users to play their part. Some of its programmes or activities – supported by the National Environment Agency (NEA) – initiated and conducted include the Happy Toilet Programme, Happy Toilet School Education programme for Preschools, STAR (Sustaining Toilets As Restrooms) Awards Programme, Eco-Assessor Programme and LOO (Let's Observe Ourselves) Carnival & Awards. RAS is a strategic partner in national community events like Clean & Green Singapore and is also a founding member of the World Toilet Organization and the Keep Singapore Beautiful Movement.*

## **About World Toilet Day**

*World Toilet Day is observed annually on 19 November since 2001. This international day of action aims to break the taboo around toilets and raise global awareness of the daily struggle for proper sanitation that a staggering 2.5 billion people face. In a bid to make sanitation for all a global development priority, the United Nations General Assembly designated 19 November as World Toilet Day on 24 July 2013.*

## **Glossary of Chinese Terms (In alphabetical order)**

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|--|-----------------------|
| 1. Detect Feedback Eliminate Clean (DFEC) Smart Restroom Solutions | 检测反馈消除清洗 (测馈除洗)智能卫浴系统 |
| 2. Happy Toilet Programme  | 康乐公厕计划                |
| 3. LOO (Let's Observe Ourselves) Awards                            | 卫浴文化奖                 |
| 4. President Ho Chee Kit   | 会长何主杰                 |
| 5. Restroom Association (Singapore)                                | 新加坡卫浴文化协会             |
| 6. World Toilet Day  | 世界厕所日                 |

## ANNEX A

### **Detect Feedback Eliminate Clean (DFEC) Smart Restroom Solutions**

The DFEC Smart Restroom Solutions offer the holistic approach on effective maintenance as follows:

- DETECT

The use of sensors, which act as an autonomous system, can effectively detect, monitor and feedback any defects or situations such as ammonia, people traffic, lighting levels, abnormal water usage, hand soap, hand towels, toilet paper and litter bins. Some can be rectified through automation while others will alert on demand cleaning needs through notifications. When toilets are not in satisfactory conditions and cannot be rectified through mechanical automation, notification alerts are instantly sent to the owners, operators, facility management crew and cleaning supervisors so that the cleaning crew can be deployed on site to rectify them in the quickest possible time. The use of sensors can also effectively gather data for useful analytics such as the determination of peak and off-peak usage and forecast cleaning regimes to optimise cleaning crew deployment. The use of sensors not only translates to improved cleaning and maintenance efficiency but also better user satisfaction and lesser reliance on manpower.

- FEEDBACK

Defects and any situations, which cannot be effectively monitored by smart sensors, can be complemented with the installation of an interactive feedback system. Installation of an interactive feedback system effectively complements the smart sensors in the event if the sensors are defective or under servicing and maintenance. On the other hand, the installation of sensors also complements the feedback system to monitor the validity of public feedback. An interactive feedback system can provide a simple and intuitive channel for public users to feedback the state of the toilet. Any negative feedback will instantly alert the maintenance management and cleaning crew for any specific follow-up actions in the quickest possible time, thus ensuring the best user experience. The information collected on the real time monitoring of the performance levels of the cleaning crew can effectively serve as justification for rewards or improvements. In addition, the feedback system is an extensive data gathering platform that also provides relevant preventive and predictive analytics for owners, operators and cleaning companies. The data collected can be used for resource planning and allocation, equipment reliability, cleaning crew's attendance and performance evaluation, visitors trending and others.

- ELIMINATE

Ammonia, odour, bacteria and viruses can be better eliminated during toilet cleaning with the use of green sanitisers and deodourisers such as ozonated water. The application of infused anti-stain material or self-cleaning protective coatings on tiles, basins, urinals and WCs can provide a layer of coating to prevent moisture, dirt, grime and oil. Surfaces protected by this coating facilitate cleaning efforts and eliminate the problem of tough stains and graffiti. Some coatings also have an antibacterial feature and they can eliminate bacteria which comes into contact with the coated tiles.

- CLEAN

The adoption of technology such as machinery to facilitate toilet cleaning and also the adoption of advanced facilities for self-cleaning by users such as the use of bidets, self-powered taps, fast-drying hand dryers, taps integrated with fast and hygienic hand-drying function for effective hand washing. The use of self-powered taps eliminates the need to provide electrical points to power the sensors in the taps. The tap sensors are powered internally. Running water will create power which is stored in a battery built into the tap. Power from the battery will be used for sensing purposes for next use. The use of fast-drying and hygienic hand dryers can eliminate operational complexity to store, replenish and dispose used towels. Fast-drying hand dryers do not need any heating element which is energy saving and eco-friendly as compared to conventional warm air dryers which are high in energy consumption. Fast-drying hand dryers can be equipped with HEPA filters which trap bacteria and viruses but they require replacement periodically. This translates to cleaner air blown onto the hands. There are hand dryers that allow drying of hands at the wash basin without the need to move to a separate drying area, thus reducing wet floors.

## ANNEX B

### Happy Toilet Programme

Latest Number of Happy Toilets				
3-Stars	4-Stars	5-Stars	6-Stars	TOTAL
201	705	376	14	1296

The Happy Toilet Programme (HTP) was launched by Mr Lim Swee Say, the former Minister for the Environment on 1 July 2003. The HTP was developed and implemented by RAS with the strong support from the National Environment Agency (NEA).

The HTP is a star-grading initiative for public toilets which focuses on five main areas - Design, Cleanliness, Maintenance, Effectiveness and Satisfaction. Users will also leave the toilet happy, as the programme will ensure that they have the best experience, with all their needs met.

The cornerstone of the HTP is a grading system, based on minimum and progressive standards that start at 3 stars, to 4 stars, 5 stars and a maximum of 6 stars. The 6-star rating is the latest highest accreditation introduced with effect from 1 January 2015.

Application is open to all owners of public toilets in Singapore, anytime throughout the year. Once graded, the certification of quality has 12 months' validity. "Happy Toilets" will be promoted through the RAS website so that the public can identify star graded facilities.

3 stars (at least 60 out of 108 points) = Clean Restroom

- Facilities in working condition
- Provision of basic amenities i.e. hand soap, toilet paper, etc
- No odour, litter-free
- Reasonably dry floor and facilities
- Customer Satisfaction

4 stars (at least 86 out of 108 points) = Good Restroom

- Meet all the above-mentioned 3 stars' requirements
- Special delights and user-friendly facilities
- Adoption of at least one of the DFEC (Detect, Feedback, Eliminate & Clean) smart solutions

5 stars (at least 96 out of 108 points) = Premium Restroom

- Meet all the above-mentioned 4 stars' requirements
- Eco-friendly facilities
- Adoption of at least two of the DFEC smart solutions

6 stars (at least 104 out of 108 points) = Magnificent Restroom

- Meet all the above-mentioned 5 stars' requirements
- Adoption of all four of the DFEC smart solutions to increase productivity and efficiency
- All cleaning attendants completed the Singapore Workforce Skills Qualifications (WSQ) module in washroom cleaning.

For more details, please visit <http://www.toilet.org.sg/happytoilets>

## ANNEX C

### **LOO (Let's Observe Ourselves) Awards**

#### **Scope**

All efforts made by an organisation and individual in promoting and enhancing the standard of restroom cleanliness will be taken into account in the selection of recipients for the awards.

#### **Eligibility**

The LOO Awards is open to all organisations and individuals in Singapore.

#### **LOO Awards Categories**

There are three (3) LOO Awards categories open for nominations: Organisation, Cleaning Industry and Individual.

- Organisations are awarded in the following categories:
  1. Private Sector/Public Sector
  2. Tertiary Institution
- Cleaning Industry is awarded in the following categories:
  1. Cleaning Service Provider
  2. Restroom Cleaning Attendant
- Individuals are awarded in the following categories:
  1. Private/Public sector individual
  2. Youth (secondary and above)
  3. LOO Kidz (primary)

The following categories are not open for nominations.

- Best Happy Toilets are awarded in the following categories:
  1. Coffee Shop
  2. Food Court
  3. Market and Food Centre
  4. Public Transport
  5. Shopping Centre
  6. Happy Toilet of the Year
- Preschools and schools are awarded under Happy Toilets @ Preschools Programme and STAR (Sustaining Toilets As Restrooms) Awards Programme respectively.

## **ORGANISATION**

S/N	Recipient	Type	Description of Achievements
1	Sentosa Development Corporation	Public Sector	<ul style="list-style-type: none"> <li>• 5-star rating for all its 24 participating Happy Toilets with 8 upgraded from 4-stars to 5-stars in 2019</li> <li>• Palawan East and Palawan West awarded ASEAN Public Toilet Awards</li> </ul>
2	SMRT Trains Ltd	Private Sector	<ul style="list-style-type: none"> <li>• More than 70 MRT stations certified as Happy Toilets</li> <li>• Adoption of smart technology to increase productivity</li> </ul>

## **CLEANING INDUSTRY**

S/N	Recipient	Type	Description of Achievements
3	A-Force Maintenance Pte Ltd	Cleaning Service Provider	<ul style="list-style-type: none"> <li>• More than 60 MRT train stations accredited 4 or 5-star Happy Toilets</li> <li>• 70 percent of its 600 cleaning attendants trained in WSQ environmental cleaning</li> <li>• Accredited National Environment Agency's Clean Mark Silver Award</li> </ul>
4	Mdm Yeo Yoke Soi <APSN Katong School>	Restroom Cleaning Attendant	<ul style="list-style-type: none"> <li>• 16 years of cleaning experience</li> <li>• Completed six WSQ courses in environmental cleaning including washroom cleaning</li> <li>• Maintained toilets at APSN Katong School which was awarded Gold STAR award under the STAR (Sustaining Toilets As Restrooms) Awards Programme</li> </ul>
5	Mdm Ariyamalai d/o Periasamy <Cleaning Express Pte Ltd>		<ul style="list-style-type: none"> <li>• 10 years of cleaning experience</li> <li>• Maintained 5-star Happy toilets at Seletar Country Club</li> <li>• Completed WSQ course in washroom cleaning</li> <li>• Certificate of Commendation for honestly returning a handbag</li> </ul>

6	Mdm Cheong Yuong Fong <Cleaning Express Pte Ltd>	Restroom Cleaning Attendant	<ul style="list-style-type: none"> <li>• 20 years of cleaning experience</li> <li>• Maintained 5-star Happy toilets at Seletar Country Club</li> <li>• Completed WSQ course in washroom cleaning</li> <li>• Certificate of Commendation for honestly returning wallet</li> </ul>
7	Mr Mat Jaeh Bin Abdul Wahab <Cleaning Express Pte Ltd>		<ul style="list-style-type: none"> <li>• 10 years of cleaning experience</li> <li>• Maintained 5-star Happy toilets at Seletar Country Club</li> <li>• Completed WSQ course in washroom cleaning</li> </ul>
8	Mdm Phang Sum Moi <Cleaning Express Pte Ltd>		<ul style="list-style-type: none"> <li>• 9 years of cleaning experience</li> <li>• Maintained 5-star Happy toilets at Seletar Country Club</li> <li>• Completed WSQ course in washroom cleaning</li> </ul>
9	Mdm Lee Hong Eng <Eng Leng Contractors Pte Ltd>		<ul style="list-style-type: none"> <li>• 12 years of cleaning experience</li> <li>• Completed four WSQ/NSRS courses in environmental cleaning including washroom cleaning</li> <li>• Maintained toilets at St Anthony's Primary School which was awarded Gold STAR under the STAR (Sustaining Toilets As Restrooms) Awards Programme</li> </ul>
10	Mdm Yeo Soh Hon <PCF Sparkletots Preschool @ Chua Chu Kang Blk 10>		<ul style="list-style-type: none"> <li>• 19 years of cleaning experience</li> <li>• Completed on-site training conducted by the Restroom Association (Singapore)</li> <li>• Preschool accredited with Early Childhood Development Agency's Singapore Preschool Accreditation Framework and Platinum Award for achieving the three thumbs-up accreditation under the Happy Toilets @ Preschools programme from 2017-2019.</li> </ul>
11	Mrs Arumugam Devi <LS 2 Services Pte Ltd>		<ul style="list-style-type: none"> <li>• 9 years of cleaning experience</li> <li>• Completed six NSRS courses in environmental cleaning including washroom cleaning</li> <li>• Maintained toilets at Nan Chiau High School which was awarded Gold STAR under the STAR (Sustaining Toilets As Restrooms) Awards Programme</li> </ul>



12	Mdm Sim Teck Kim <LS 2 Services Pte Ltd>	Restroom Cleaning Attendant	<ul style="list-style-type: none"> <li>• 8 years of cleaning experience</li> <li>• Completed six NSRS courses in environmental cleaning including washroom cleaning</li> <li>• Maintained toilets at Nan Chiau High School which was awarded Gold STAR under the STAR (Sustaining Toilets As Restrooms) Awards Programme</li> </ul>
13	Mr Chithrasenan A/L Speedaran <Springmount Services Pte Ltd>		<ul style="list-style-type: none"> <li>• 5 years of cleaning experience</li> <li>• Maintained 5 &amp; 6-star Happy toilets at The Shoppes at Marina Bay Sands</li> <li>• Attended five WSQ courses in environmental cleaning including washroom cleaning</li> </ul>

## **INDIVIDUAL**

S/N	Recipient	Type	Occupation	Description of Achievements
14	Ms Emma Chan Yi Zhen	LOO Kidz	Student, Chongfu School	<ul style="list-style-type: none"> <li>• Student leader who led the team in planning and executing restroom decorations, poster designs and logistics including conceptualising the theme of the restroom decorations</li> <li>• Conducted assembly sharing to educate everyone to upkeep the maintenance of the toilets in the school</li> <li>• Undertook cleaning tasks and took ownership of her school environment</li> </ul>
15	Ms Shuanne Seah		Student, Convent of the Holy Infant Jesus (CHIJ) Kellock	<ul style="list-style-type: none"> <li>• An active member of the 'Friend of Singa' programme and led her team to create restroom etiquette teaching slides for the prefects to present to all the Primary 5 and 6 classes</li> <li>• Presented the restroom etiquette teaching slides to Primary 4 students</li> <li>• Carried out cleaning routine, spring cleaning and canteen keepers' duties in school</li> </ul>
16	Mr Taylor Kenneth James Tadas		Student, Park View Primary School	<ul style="list-style-type: none"> <li>• Undertook restroom assessments and provided feedback to the school to improve the standard of the restrooms</li> <li>• Shared good restroom etiquette with the</li> </ul>

		LOO Kidz		school during assembly including to show gratitude to cleaning attendants for their efforts in restroom cleaning
17	Ms Tricia Chan Chu Yi		Student, West Wood Primary School	<ul style="list-style-type: none"> <li>• An active Green Club member who undertook daily restroom inspections using self-created inspection charts and brief the school on findings to encourage the school to practise good restroom etiquette.</li> <li>• Volunteered to present at the first Pre-Assembly Moment sharing session on restroom etiquette to the school</li> <li>• Organised activity to appreciate restroom attendants to purchase fruit packages for them</li> <li>• Conducted educational outreach to the elderly from SilverAce Eldercare Centre and to MOE Kindergarten pupils</li> </ul>

### **BEST HAPPY TOILET**

The following toilets under the Happy Toilet Programme (HTP) are awarded for achieving the highest scores in terms of cleanliness, maintenance, effectiveness, user satisfaction, design and bonus features.

S/N	Recipient	Type	Star Rating	Score	Remarks
18	21 Street Eating House	Coffee Shop	5-Star	96 / 108	Selected among 30 HTP coffee shops
19	Kopitiam - National University Hospital Main Building Lobby	Food Court	5-Star	98 / 108	Selected among 15 HTP food courts
20	Pasir Ris Central Hawker Centre	Market & Food Centre	5-Star	100 / 108	Selected among 41 HTP market & food centres
21	Bukit Panjang Integrated Transport Hub	Public Transport	5-Star	99 / 108	Selected among 144 HTP public transport hubs & stations
22	The Shoppes at Marina Bay Sands, Zone 4 Basement 1	Shopping Centre	6-Star	104 / 108	Selected among 311 Happy Toilets at 36 Shopping Centres
23	The Shoppes at Marina Bay Sands, Zone 4 Basement 1	Happy Toilet of the Year	6-Star	104 / 108	Selected among 1282 Happy Toilets islandwide

## **PLATINUM HAPPY TOILET PRESCHOOL**

S/N	Recipient	Remarks
24	Agape Little Uni. (Jurong West)	<p>Preschools awarded the highest Three Thumbs-up accreditation for <b>three consecutive years</b> under the Happy Toilets @ Preschool Programme for completing all of the following three phases:</p> <ol style="list-style-type: none"> <li>1. Design phase - All toilets meeting the minimum standard equivalent to the 3-star rating of the commercial Happy Toilet Programme.</li> <li>2. Maintenance phase - On-site training for caretakers and housekeepers on dos and don'ts of preschool and restroom cleaning</li> <li>3. Education phase - Hygiene talks/activities for preschoolers and hygiene workshops for teachers or hygiene talks for parents/guardians</li> </ol>
25	Agape Little Uni. (Kallang)	
26	Holy Family Kindergarten	
27	PCF Sparkletots Preschool @ Chua Chu Kang Blk 10	
28	Yuvabharathi International School Montessori	

## **PLATINUM & GOLD STAR SCHOOLS**

S/N	Recipient	Remarks
<b>Gold STAR Schools</b>		<p>Schools are awarded the highest Gold STAR accreditation under the STAR (Sustaining Toilets As Restrooms) Awards Programme when they complete all three phases.</p>
29	APSN Katong School	
30	Bedok Green Primary School	<p>Schools with Gold STAR accreditation for <b>three consecutive years</b> are awarded the Platinum STAR.</p>
31	Bendemeer Primary School	
32	Concord Primary School	<p>The three phases are as follows:</p> <ol style="list-style-type: none"> <li>1. Education &amp; Awareness - Assembly talks for students and workshops for students assigned to take up any of the following projects: <ul style="list-style-type: none"> <li>- Decorating / enhancing the washrooms</li> <li>- Cleaning attendants' appreciation activities</li> <li>- Creating educational/awareness material for an exhibition</li> <li>- Conducting surveys or case studies</li> <li>- Creating videos or web content</li> <li>- Inspecting their own washrooms and providing feedback</li> <li>- Holding assembly talks in school or at other establishments</li> </ul> </li> </ol>
33	Convent of the Holy Infant Jesus (CHIJ) Kellock	
34	Convent of the Holy Infant Jesus (CHIJ) Our Lady Queen of Peace	
35	Fern Green Primary School	
36	Frontier Primary School	

37	Qihua Primary School	<p>2. Maintenance &amp; Service - Checking the qualifications and cleaning routines of all cleaning attendants to ensure they are trained and to conduct training for those who are not.</p> <p>3. Design &amp; Standards - All toilets meeting the minimum standard equivalent to the 3-star rating of the commercial Happy Toilet Programme.</p>
38	Waterway Primary School	
39	Woodlands Ring Primary School	
<b>Platinum STAR Schools</b>		
40	Bukit View Primary School	
41	Jiemin Primary School	
42	Northland Primary School	
43	Oasis Primary School	
44	Park View Primary School	