

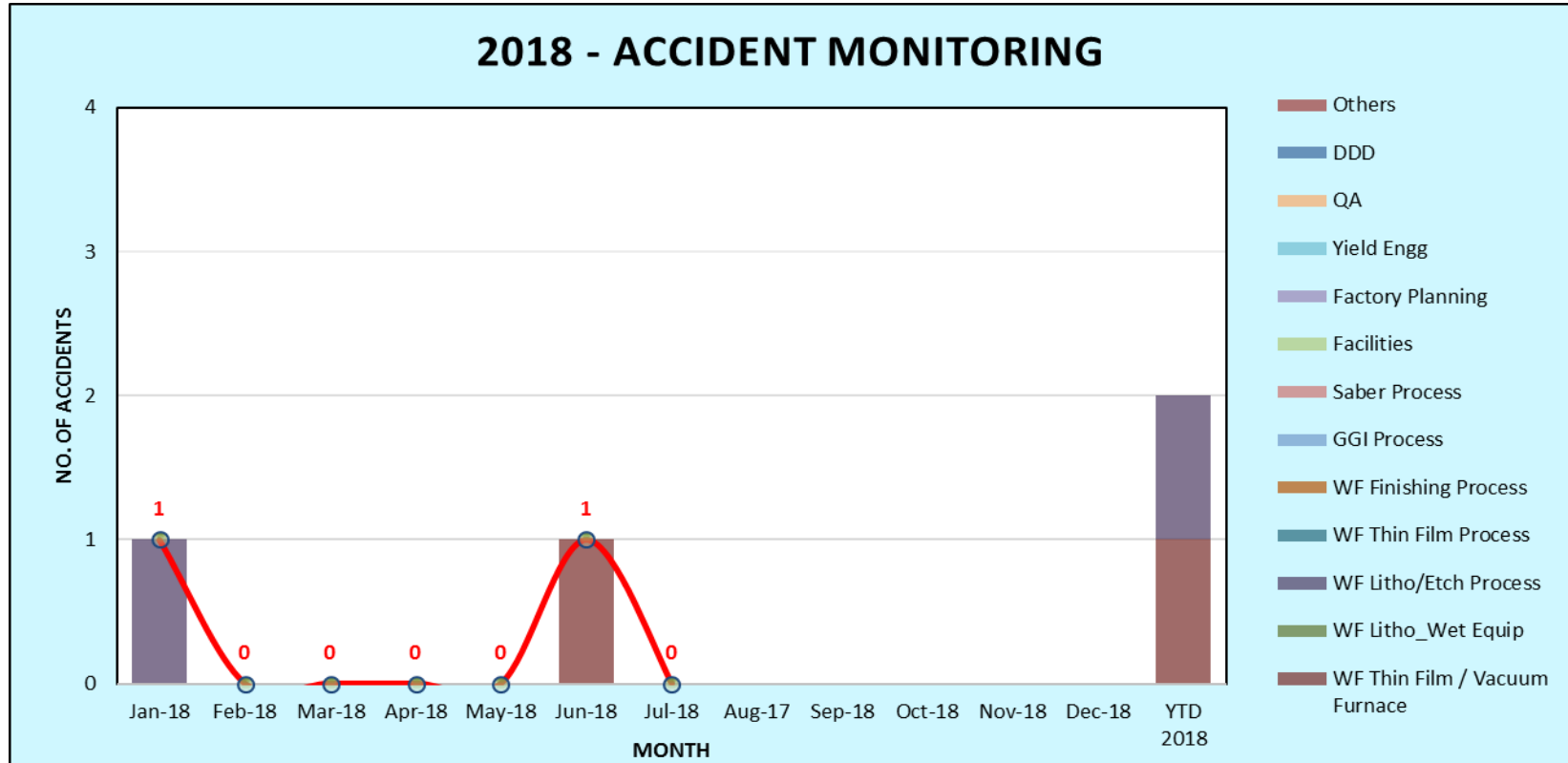
# Environmental, Health and Safety Committee Meeting

Environmental, Health and Safety  
Facilities Department  
7 August 2018

# **AGENDA:**

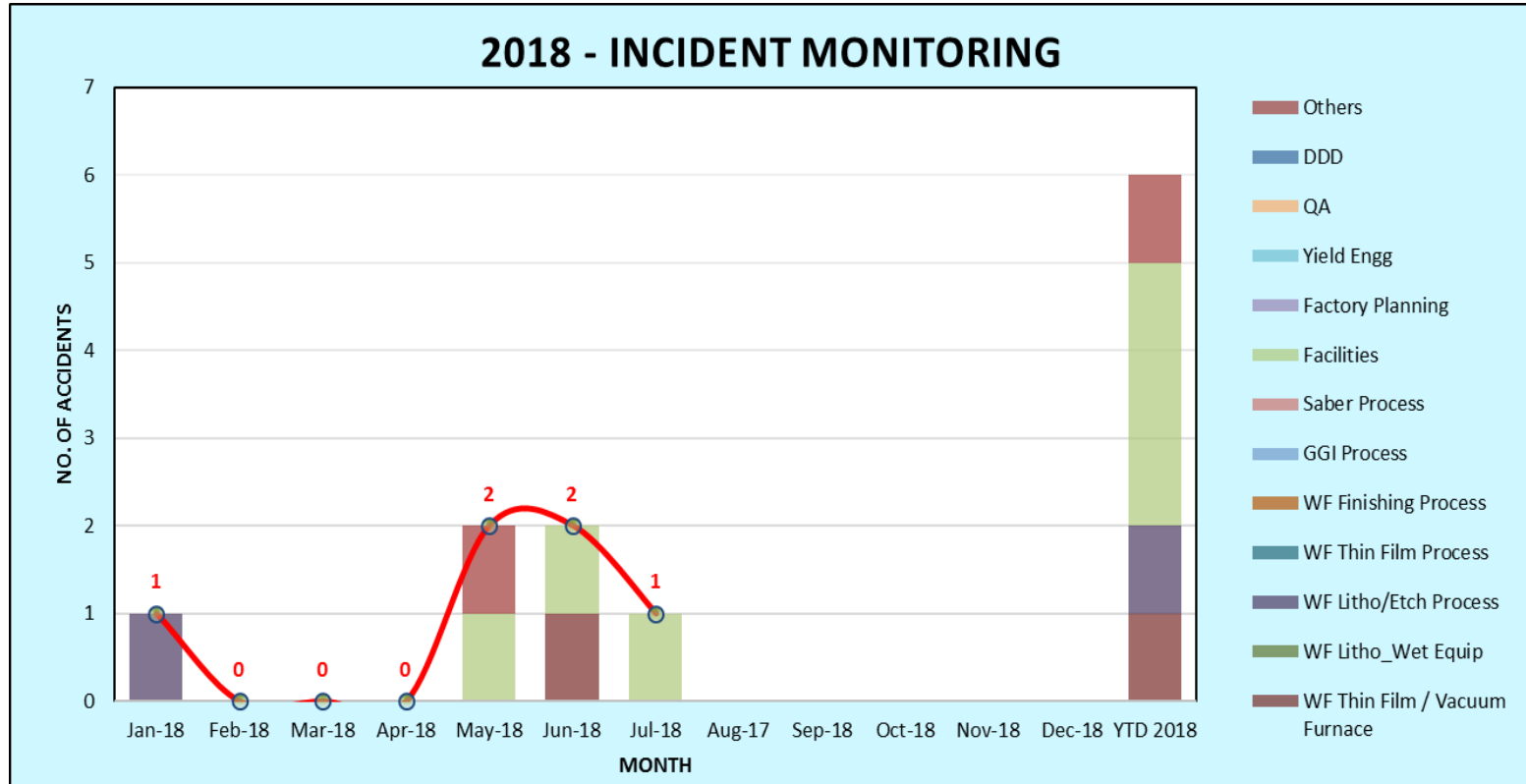
- 1) 2018 Accident/Incident Monitoring and Update**
- 2) EHS Committee Inspection Report**
- 3) EHS Performance - EHS KPI/Objective & Target Status (2017-2018)**
- 4) EHS Procedure Updates**
- 5) MBB IH Monitoring**
- 6) Other Matters**

# 1. 2018 Accident/Incident Monitoring



1. January 2018 – An employee tripped and fell on the last step, while ascending the stairs outside the main building. (LWC) 16 Jan 18
2. February 2018 - No accident recorded
3. March 2018 - No accident recorded
4. April 2018 - No accident recorded
5. May 2018 - No accident recorded
6. June 2018 - An employee sustained a laceration wound on his left ring finger hit by a rotating fan blade at WF (First Aid Case) 29 Jun 2018
7. July 2018 - No accident recorded

# 1. 2018 Accident/Incident Monitoring



1. January 2018 - An employee tripped and fell on the last step, while ascending the stairs outside the main building . (LWC)16 Jan 18
2. February 2018 - No incident recorded
3. March 2018 - No incident recorded
4. April 2018 - No incident recorded
5. May 2018 - Small fire at the canteen kitchen (4 May 2018); Fire alarm at flammable store room (11 May 2018)
6. June 2018 - The underside of the mat is wet at Gent rest room at level 4. Floor was also wet. (12 June 2018 -Near Miss Case)  
- An employee sustained a laceration wound on his left ring finger due to a rotating fan blade at WF (First Aid Case- 29 Jun 2018)
7. July 2018 - Men's toilet at the canteen wet and slippery (4 July)

# 1. 2018 Accident/Incident Monitoring



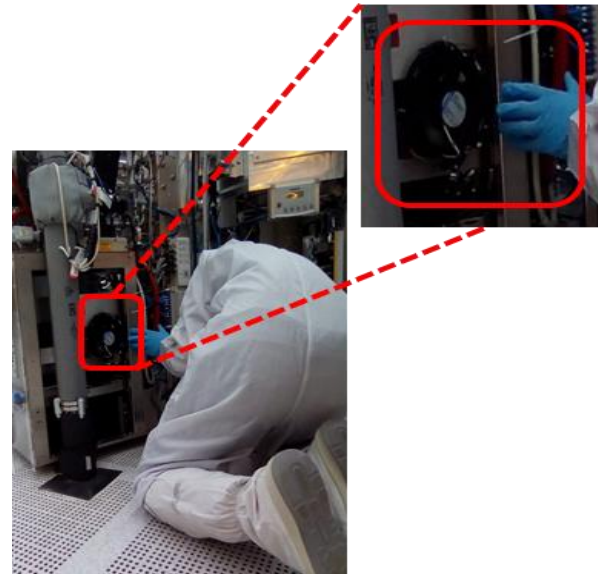
## Reset of Safety Score Board – First Aid Case due to Caught in by Moving Part (Rotating Blade of the Chamber DC Power Supply Ventilating Fan)

To All:

There was a first aid case happened on 29<sup>th</sup> June 2018 around 4pm, at Main Building Level 4- Wafer Fab Production Area. Please refer below on the details.

**What happened:** Employee sustained a laceration wound on his left ring finger due to a rotating fan blade.

**How it happened:** The side cover of the tool WF-Etch24 PM2 was removed as there was an RF generator replacement activity going on. During this activity, RF generator power was off while the power supply unit with the cooling fan was still running. The injured personnel went over to see and learn from his colleague. While observing the activity, he bend down and leaned towards the rear part of the chamber for better visibility of the RF generator connections behind. To support his body, he placed his left hand on the side part of the machine where a cooling fan is mounted and running. As a result, his left ring finger was accidentally caught by the rotating blade of the fan causing him a minor laceration.



**Type of Accident:** First Aid Case

# 1. 2018 Accident/Incident Monitoring



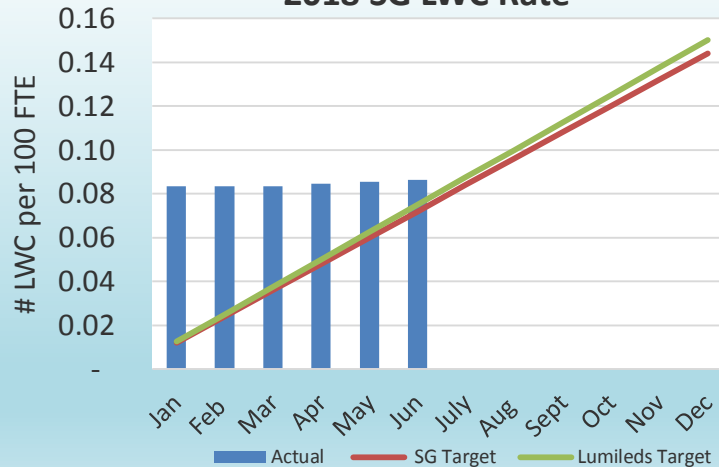
**What can be done to avoid such similar accident?**

- Look and know the hazards and dangers in your job**
- Follow established safe work procedures when performing work**
- Be aware of pinch points, rotating or moving parts**
- Avoid wearing loose clothing or jewelry that may be caught in by moving parts**
- Do not operate machine with safeguards removed.**
- Do not carry out the work unless you are trained on the equipment or system**
- Conduct an EHS Risk Assessment when there is a change or modification on tool.**

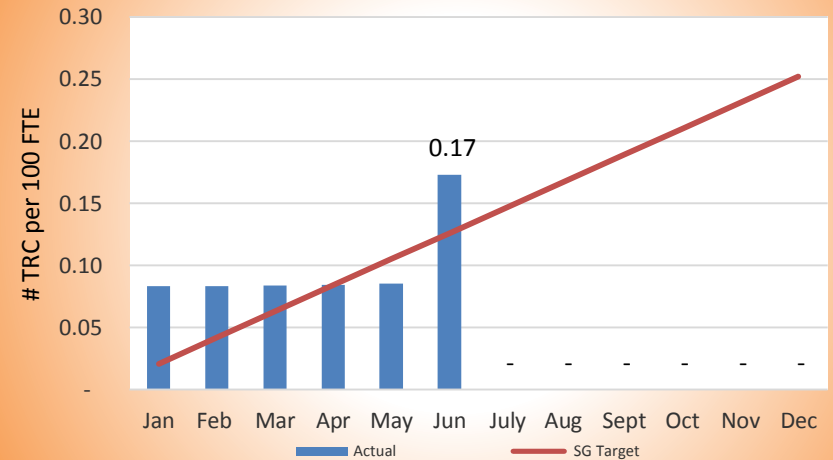
# 1. 2018 Accident/Incident Monitoring

## Accident Rate as of June 2018

2018 SG LWC Rate



2018 SG TRC Rate



LWC – number of accidents with medical leave

TRC - number of LWI + non lost workday injury + occupational illness + First Aid

# 1. 2018 Accident/Incident Monitoring

## Injury Prevention Data

Indicator	Further information below the indicator (or on “i” button)	Jan 2018 Actual Data	Feb 2018 Actual Data	Mar 2018 Actual Data	Apr 2018 Actual Data	May 2018 Actual Data	June 2018 Actual Data	Remarks (Data Gathered from)
Number of near misses reported	Please enter the number of near misses reported followed with improvement actions.	0	0	0	0	1	1	Email/Comm; FIR
Number of at-risk conditions observed	Please enter the number of at-risk conditions observed that were followed with improvement of the workplace. They can come from dedicated workplace safety inspection or from 6S audits.	29	12	5	15	6	16	Safety Inspections and Quality 6S Audits/Email Comm/ Facility Work Order/ BBS At risk Conditions/Near miss reporting
Number of performed behavior observations	Please enter the number of performed behavior observations followed with feedback provided by observer to observed employee.	8	7	12	10	3	0	BBS Enabled Observations
Other injury prevention initiative	Please shortly describe any other injury prevention initiative that was taken in your site.	0	0	4	1	0	0	<a href="#">Injury Prev Initiative</a> !A1
YTD Injury Preventable Data		37	19	21	26	10	17	
			56	77	103	113	130	



## 2. EHS Committee Inspection

Month: July 2018







### EHS Inspection Report

Month: July 2018







Department / Area Inspected: Chemical Warehouse, Clinic, Logistics Warehouse  
Inspected by: Ng Poh Chay/Jhun / Jennifer/Oliver

Date of Inspection : 2-Jul-18  
Time of Inspection : 3.30pm-4.30pm

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
1	ChemTech Office	Boxes and empty cartons stacking in front of notice board		- Clear and dispose empty carton boxes and store other boxes in a designated location		Kelly/Eric ww28	CLOSED	Jhun 9 Jul 2018
2	ChemTech Office	Fire extinguisher obstructed by the trash bin and is no red tape on top		Remove and replace trash bin with smaller one and place on the other side of the water dispenser		Kelly/Eric ww28	CLOSED	Jhun 9 Jul 2018







## 2. EHS Committee Inspection

Month: July 2018

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
3	Chemical Store entrance area	The PPE inspection guideline displayed near the staging area has no revision control to ensure it is the latest version to be followed		Remove inspection guide; users to make reference to the latest procedure in LMS		Kelly/Eric	CLOSED	Jhun 12 Jul 2018
4	Chemical Store	Storage license posted is expired - valid until 31 Jan 2018		Remove and replace with the latest and valid license		Kelly/Eric	CLOSED	Jhun 12 Jul 2018
5	Chemical Store	The cabinet is placed out of the red guideline		Extend the red floor marking		Jhun	CLOSED	Jhun 31 Jul 2018

## 2. EHS Committee Inspection

Month: July 2018

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
6	Chemical Store	Access to emergency shower and eyewash partly obstructed		Remove cabinets to clear obstruction		Kelly/Eric	CLOSED	Jhun 2 Jul 2018
6	Chemical Store	The minimum requirement for the water level to pump the water out is not properly define		Provide a visible level marking on the container. Once water reaching the level, water or contaminated water has to be pump out		Eric	CLOSED	Jhun 12 Jul 2018
8	Logistics Warehouse	Standard labelling is not used for the rubbish bin		Remove and replace with standard label for general waste		Helly	CLOSED	Jhun 12 Jul 2018

## 2. EHS Committee Inspection

Month: July 2018



### EHS Inspection






Month: July 2018

Department / Area Inspected: GGI 1,2,3 , Saber VI , Overmold

Inspected by: Victor Oh (MFG), Jennifer (EHS), Victor Ting ( Equipment) , Karen Won ( GGI Lead) , Lee Tsu Fern ( GGI FA)


Date of Inspection : 10-Jul-18

Time of Inspection : 2/30pm- 3.30pm

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
1	GGI Plasma	Did not use the standardized General waste label		Removed the General waste label and replaced with the standardized label		Victor Oh / Karen Won ww29	CLOSED	Jhun 12 Jul 18
2	GGI Fab 1	Unused Red chemical waste bin at empty area and white tape on floor without any dustbin	 	Removed the red chemical waste bin and the white tape on floor.		Victor Oh / Karen Won ww29	CLOSED	Jhun 12 Jul 18

## 2. EHS Committee Inspection



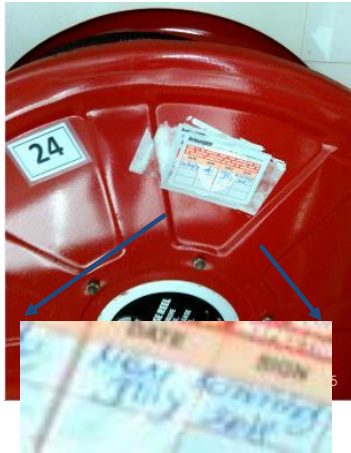

Month: July 2018

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
3	GGI Fab 2	Wear and tear red tape for the AGV		Replace the red tape		Victor Oh / Karen Won ww29	CLOSED	Jhun 12 Jul 18
4	GGI Fab 1	narrow path to the work station, where the edge of the work desk might potentially	 	Relocate to the nearest pillar, but need to raise facility order to install network point  FAC-01735		Victor Oh ww29	CLOSED	Jhun 12 Jul 18
5	GGI Fab 2	No duty roster display at spill kit		Request EHS to print duty roster to display on the spill kit		Jhun ww29	CLOSED	Jhun 12 Jul 18




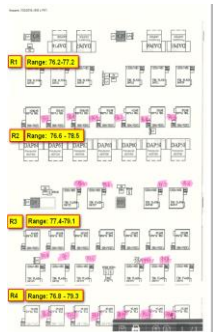


## 2. EHS Committee Inspection

Month: July 2018

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
6	GGI Fab 2	Label Instruction not clear "Throw HERE FIRST" and did not include what item to clear...		To replace the label to "THROW (EMPTY WAFERS SKELETON) here first ! "		Victor Oh / Dan Feng ww29	<b>CLOSED</b>	Jhun 12 Jul 18
8	GGI/OM Fab	Fire Extinguisher will be expired by July 18  Location: B03 GGI & F07 OM		Facility to check		Facility ww30	<b>CLOSED</b>	Jhun 21 Jul 18

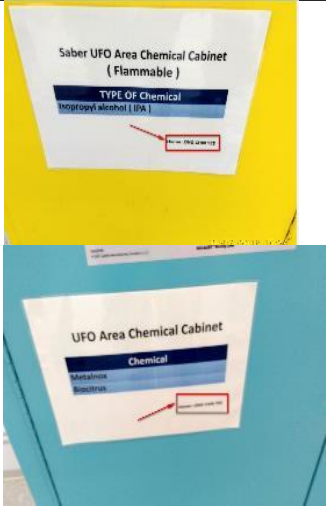
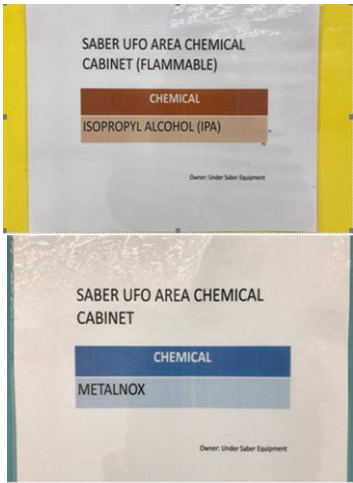

## 2. EHS Committee Inspection

Month: July 2018

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
9	GGI Fab 2 and 3	High MC noise level noticed from TDK machines with the remaining old noise reduction boxes  Row 1-2-3-4(TDK)		Request EHS to measure the noise level from all the TDK machines  R1 - 76.2 - 77.2 R2 -- 76.6 - 78.5 R3 - 77.4 - 79.1 R4 - 76.8 - 79.3		EHS - Jhun ww29	CLOSED	Jhun 23 Jul 18
10	OM	AGV signage hang at inside OM Fab and GGI Fab 1 hanging room which are inappropriate location for AGV reminder and not clear as a warning		Request Facility to relocate  Loc 1: GGI Fab at Plasma area Loc 2: AGV path		Victor Oh ww30	CLOSED	Jhun 30 Jul 18

## 2. EHS Committee Inspection

Month: July 2018

S/No.	LOCATION	OBSERVATIONS	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
11	OM	Chemical cabinet displayed with owner - Ong Chin Yee who has already resigned		To change the owner name		Guarin, Rodrigo ww29	CLOSED	Jhun 30 Jul 18
12	OM	OM epoxy hand gloves tear and wear at tip		To replace a new pair		Victor Oh ww29	Open	



## 2. EHS Committee Inspection




Month: July 2018

Department / Area Inspected : 1) Die bank + 2) MBB + 3) Saber Iv4

Date of Inspection : 1 August 2018

Inspected By : Tay Hong Yen, Wong Hon Sin, Tee Kian Hock

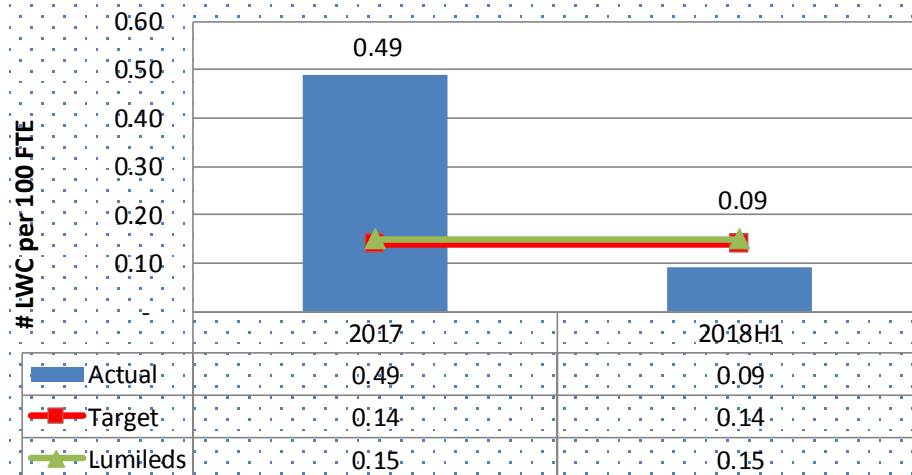
Time of Inspection : 1330hrs - 1500hrs

S/N o.	LOCATIO N	OBSERVATION S	PICTURE (BEFORE)	CORRECTIVE ACTION PLAN	PICTURE (AFTER IMPLEMENTATION)	ACTION OFFICER / TARGET DATE	STATUS	VERIFIED BY / DATE
1	Die bank	Exposure of sharp corner at the acrylic cover of cabinet.		Shift the acrylic cover until the sharp corner stick to the edge of cabinet.		Immediate	Closed	
2	Die bank	Trolley left unlocked.		Inform the FA to lock the trolley immediately.	N/A	Die bank FA / immediate.	Closed	

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

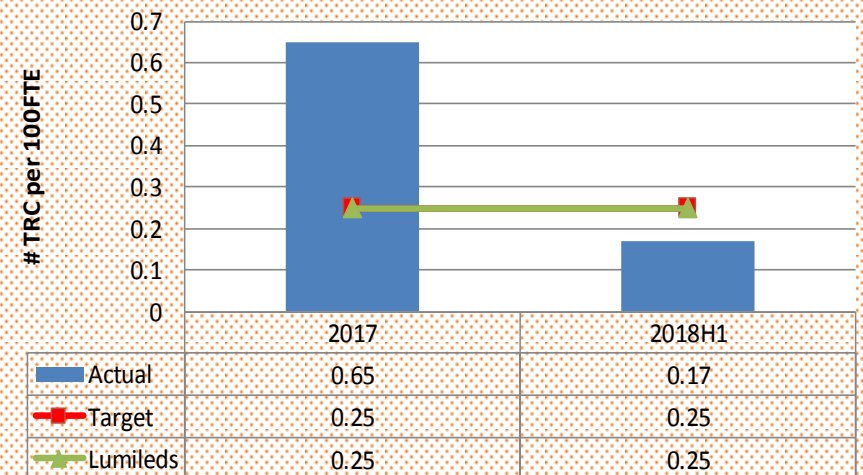
#### a. ACCIDENT RATE

##### Lost Workday Case (LWC) Rate



LWC— Number of injury cases with medical leave

##### Total Recordable Case (TRC) Rate



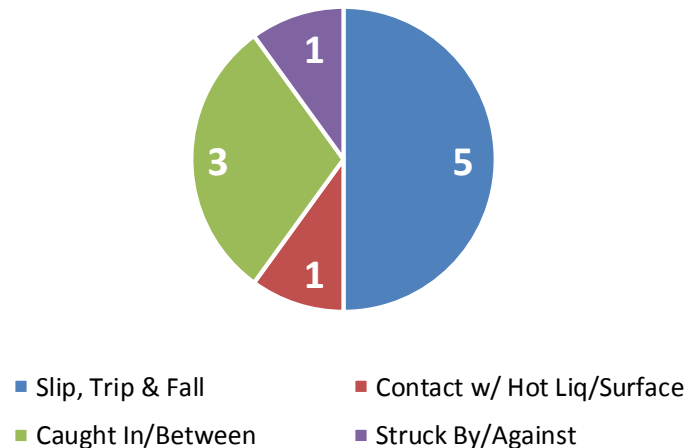
TRI - number of cases with lost workday+ medical treatment + occupational illness + First Aid

	Accident Category		
	Lost Workday	Medical Treatment	First Aid
2017	6	0	2
2018H1	1	0	1
<b>Total</b>	<b>7</b>	<b>0</b>	<b>3</b>

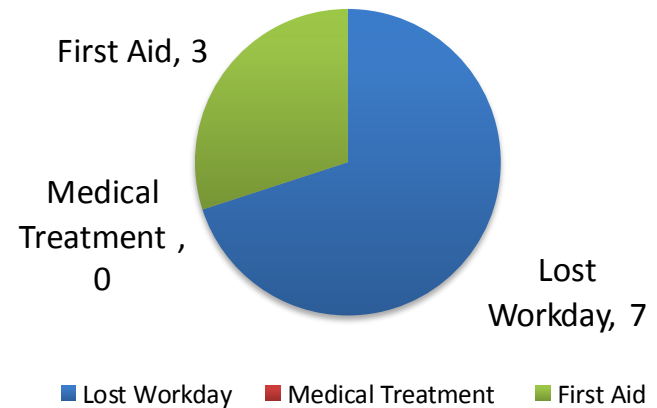
### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### a. ACCIDENT RATE

**Accident Type (2017 - 2018H1)**



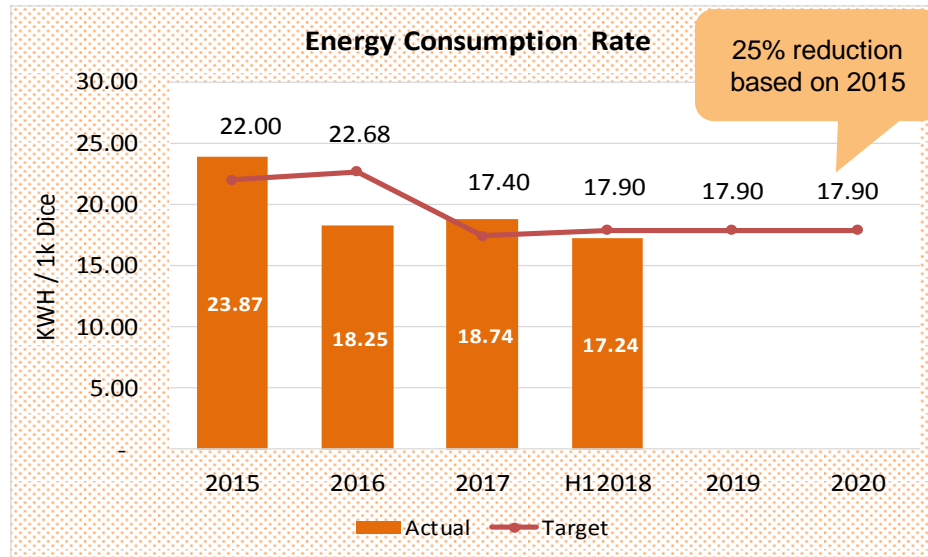
**Accident Category (2017-2018H1)**



	CAPA Status
2017 (8 cases)	All CAPA were closed
2018H1 (2 cases)	1 CAPA was closed (Jan case) 1 CAPA is still open (June case) - Risk assessment is for final review

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### A. ENERGY CONSERVATION



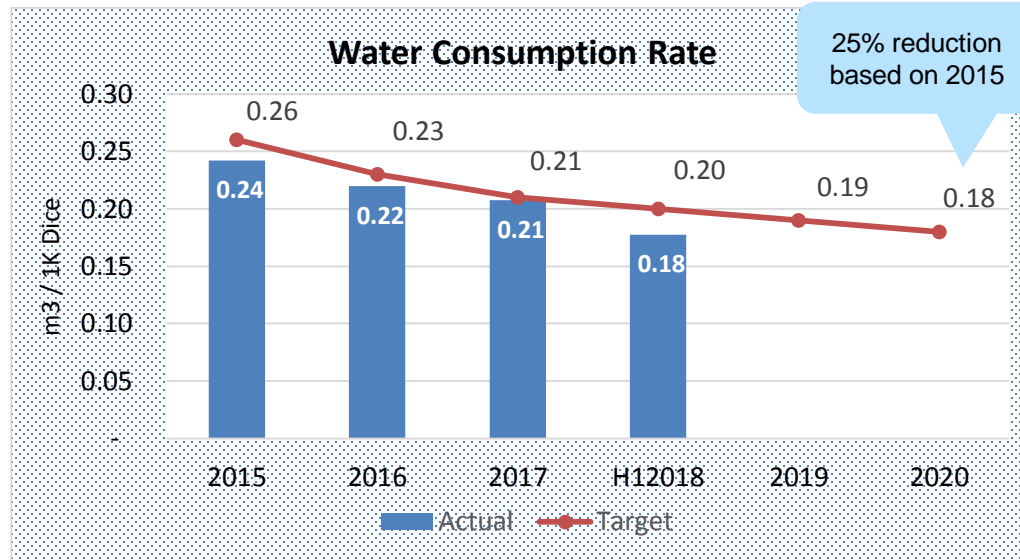
❖ **Accomplished BCA Greenmark Platinum Re- certification (2017 version) on 31-Jan-2018. Certificate valid for 3 years.**

S/N	2017 Projects Completed
1	Acid exhaust system (AEX) optimization – (Air balancing & fan modification)
2	VSD installation for AHUs & HVAC optimization
3	Replace Energy saving lightings in the plant (including yellow room)

S/N	2018 PLANNED PROJECTS
1	N2 generation plant (APSA) optimization.
2	Reduce N2 consumption by 10% in production tools, switch N2 supply to CDA
3	Facility system optimization - Operational improvement
4	Plant wide LED light replacement- Completed 98%. Plan to complete all by end 2018.
5	Relax air purification of cleanroom

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

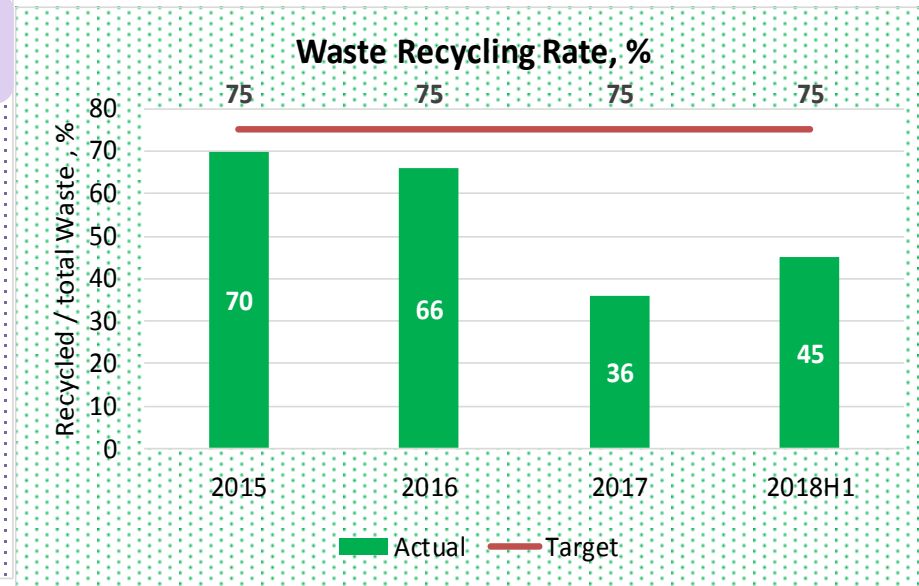
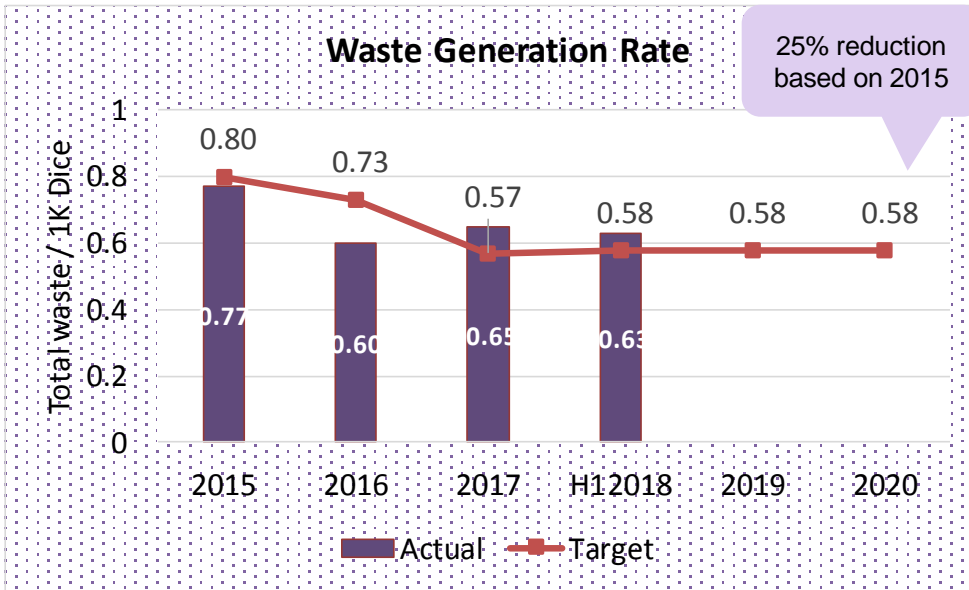
#### B. WATER CONSERVATION



S/N	2017 Projects Completed	S/N	2018 PLANNED PROJECTS
1	Monitor & tuning of various key water consuming Facilities system.	1	To fine tune and monitor CT COC system
2	Study on reuse of AHU condensate	2	To finalize Acid Rinse Water recovery
3	Improve cooling tower's COC and enhance the current water treatment	3	To further explore opportunities to save water by analyzing the remaining waste water
4	Evaluate various Acid Rinse Water Recovery proposals and select the 3 most feasible proposals	4	Explore with manufacturing/EE for more water saving opportunities
5	Explore splitting of discharge drain from tools	5	To analyze Smart water meter data to prioritize / explore water conservation areas / actions

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### C. WASTE MINIMIZATION & RECYCLING

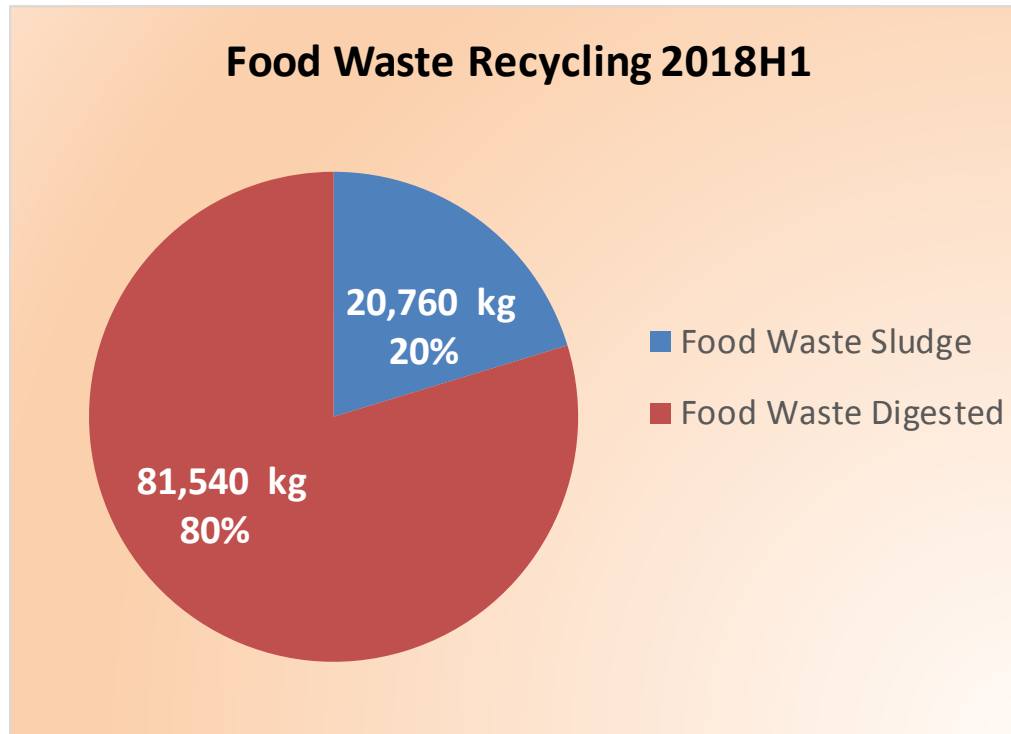


S/N	2017 Projects Completed
1	Monitor segregation and proper disposal by waste category
2	Evaluate and install food digester system in cafeteria
3	Change Ni plating anode to Ni pellet (Reduction of around 150 Kg/wk)
4	Powder waste reduction – Dual tile processing in MBB

S/N	2018 PLANNED PROJECTS
1	Fine tune and implement food digester system
2	Hazwaste vendors audit for - alternate vendors for backup system - potential vendors with heat reclaim incinerator
3	Monitor segregation and proper disposal by waste category

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### C. WASTE MINIMIZATION & RECYCLING



- Food waste recycling was installed in mid Feb and come into full operation starting March 2018
- Around 90% of the total food waste generated was digested and converted to water. The water collected is used for gardening purpose.



### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### D. COMMUNITY OUTREACH

1	Service Week 2017	<ul style="list-style-type: none"> <li>❖ 7<sup>th</sup> Jan 2017</li> <li>❖ Distribution of CNY Gift Bags to Blk 269A&amp;B Yishun St. 22</li> <li>❖ Joined by 141 employees&amp; 17 family members</li> </ul>
2	Outing with Kids 2017	<ul style="list-style-type: none"> <li>❖ 18<sup>th</sup> Nov 2017</li> <li>❖ Photography Amazing Race &amp; Movie Screening for Kids at Blk 269A&amp;B Yishun St 22</li> <li>❖ Participated by 24 employees</li> </ul>

#### Service Week 2017



#### Outing with Kids



#### Service Week 2018



1	Service Week 2018	<ul style="list-style-type: none"> <li>❖ 3<sup>rd</sup> Feb 2018</li> <li>❖ Distribution of CNY Gift Bags to Blk 269A&amp;B Yishun St. 22</li> <li>❖ Joined by 44 employees &amp; 10 family members</li> </ul>
2	Outreach Project 2018	<ul style="list-style-type: none"> <li>❖ Working with Project Hearts group for kids / senior outreach in Blk269 A/B <ul style="list-style-type: none"> <li>→ Free Water Playground at Palawan Pirate Ship (Palawan Beach @ Sentosa)</li> <li>→ Movie at Theatre</li> <li>→ Baking with Seniors</li> <li>→ Campfire / Xmas Party</li> </ul> </li> </ul>



### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

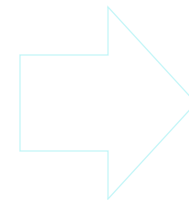
#### E. Training & Promotion

	2017 Targets & Objectives	Descriptions	Status
1	Training		
	a) Conduct Mandatory Safety Training Program	16 training topics to be conducted (14 topics mandatory)	<ul style="list-style-type: none"> <li>completed</li> </ul>
	b) Introduction of EHS On-line Training Portal (SafetyHub)	<ul style="list-style-type: none"> <li>Launch Training Portal in Q1</li> <li>migrate training from classroom based to online portal</li> </ul>	<ul style="list-style-type: none"> <li>Launch Training Portal on 3<sup>rd</sup> Feb'17</li> <li>6 topics migrated to online portal</li> </ul>
2	Promotion		
	a) Health Talk by in-House Doctor	Conduct Health Talk + Q&A over meal break (4 Sessions - 1 every Quarterly)	<ul style="list-style-type: none"> <li>Fatty Liver (9<sup>th</sup> May) - completed</li> <li>High Blood Pressure (20<sup>th</sup> Jun) - completed</li> <li>High Cholesterol disease (22<sup>nd</sup> Aug) - completed</li> <li>Diabetes (24<sup>th</sup> Oct) - cancelled</li> </ul>
	b) Health Workshop by professional speakers from hospital	Health Workshop + Q&A after lunch (4 Sessions - 1 every Quarterly)	<ul style="list-style-type: none"> <li>Dealing with Work and Personal Crisis: An Organisation's Perspective - completed</li> <li>How can we have better sleep - completed</li> <li>Keeping Anxiety and Stress in Check - completed</li> <li>Relaxation Workshop - completed</li> </ul>
	c) STF Awareness Program	Safety Consciousness Talk	- 10 talks conducted
	d) Organize EHS Carnival in Q4'16	<ul style="list-style-type: none"> <li>Health and personal wellness related carnival with exhibition</li> <li>Support STF program (My Safety Pledge)</li> </ul>	- Completed on Nov 8 & 9

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### E. Training & Promotion

	2018 Targets & Objectives	Descriptions	Status
1	Training		
	a) Conduct Mandatory Safety Training Program	<ul style="list-style-type: none"> <li>18 topics (all online annual training through safety hub)</li> </ul>	<ul style="list-style-type: none"> <li>In progress</li> </ul>
	b) New Hire EHS Orientation to Training Portal	<ul style="list-style-type: none"> <li>Migrate IL EHS Orientation to HR Training Portal</li> </ul>	<ul style="list-style-type: none"> <li>25 May 2018</li> </ul>
	c) Health training to DLs	<ul style="list-style-type: none"> <li>Target to launch 2 topics (half yearly)</li> <li>Quizzes prizes (30pax x \$20)</li> </ul>	<ul style="list-style-type: none"> <li>2 topics to be uploaded into safetyhub (IL/DL)</li> <li>Sep – Cholesterol Matters</li> <li>Mar – Lowering Blood Pressure</li> </ul>
2	Promotion		
	a) Health Talk by in-House Doctor/external speaker (for ILs)	<ul style="list-style-type: none"> <li>Conduct Health Talk + Q&amp;A over meal break (every Quarterly)</li> </ul>	<ul style="list-style-type: none"> <li>Commence in Q3</li> <li>1) Common lower limb problems – what can you do about it?</li> <li>2) Foot for Thought: Foot wear and foot care in activity/exercise/sports (Basic)</li> <li>3) Diabetes in a nutshell</li> </ul>
	b) 21 days challenge developing a good safety habit (STF prevention)	<ul style="list-style-type: none"> <li>No hand phone while walking</li> <li>Use of handrail during ascending and descending the stair</li> <li>Good walking habits</li> </ul>	<ul style="list-style-type: none"> <li>Completed end Mar 2018</li> </ul>
	c) We Care Program	<ul style="list-style-type: none"> <li>Monthly health posters</li> <li>Quarterly Quizzes (30pax x \$10)</li> <li>Quarterly Fruit Day</li> </ul>	<ul style="list-style-type: none"> <li>Health tips (July 2018)</li> <li>Poster promotion – EHS bulletin board/TV display</li> <li>Benefits of fruits (inline with Quarterly fruits day)</li> </ul>
	d) Organize EHS Carnival in Q4'18	<ul style="list-style-type: none"> <li>Health and personal wellness related carnival with exhibition</li> <li>Safety Improvement awareness</li> <li>others</li> </ul>	<ul style="list-style-type: none"> <li>Q4 (30-31 Oct)</li> <li>BBS program</li> <li>STF</li> </ul>



### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### F. Safety Improvement



S/N	2017 Targets & Objectives	Descriptions	2017 Status
1	Slip Trip Fall Improvement	DF hook-up safety improvement phase 2	Completed
2	BBS KPI % Safe and Participation	WF/DF → % Safe 98%	99.2%
		WF/DF → Participation : 96%	98%
		GGI/Saber → % Safe : 95%	99%
		GGI/Saber → Participation :95%	95%
		Fac/Logistic → % Safe : 85%	96%
		Fac/Logistic → Participation :95%	100%
3	BBS for Facility and Logistic Group	<ul style="list-style-type: none"> <li>Form up BBS committee</li> <li>Create and Review CBI checking</li> <li>Training for committee / Observers</li> </ul>	Completed 1 <sup>st</sup> Oct start BBS Observation
4	BBS Observer Training	<ul style="list-style-type: none"> <li>Increase Wafer/Die Fab Observer from 25% to 35%</li> <li>Increase GGI/Saber Observer 15%</li> </ul>	<ul style="list-style-type: none"> <li>48% or 152 observers</li> <li>18% or 80 observer</li> </ul>
5	Support Slip Trip Fall Program	1) STF task Force 16 initiatives	100% Completed

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### F. Safety Improvement

#### Highlight :

#### Slip, Trip , Fall TASK FORCE

- 16 initiative implemented successfully in 2017

Items	Activity	Owner	Timeline	Status
1	Proper Walking techniques	EHS/SIT/T&P (CC/Yeo)	Aug – Dec (Monthly Program)	-Closed- refer to emails (Oct, Dec) -EHS Carnival Walking Booth Nov 2017
	• Visual Poster			
	• Awareness mail notice and awareness.			
2	Shoes / Booties Check	EHS / SIT (CC)	Aug	-Closed
3	Seminar Talk : Safety Consciousness & Self Awareness- The Way to be SAFE (Mandatory talk for all personnel )	EHS (Jennifer)	Sep/Oct (18 sessions)	-Closed-18 Sessions in Sept and 8 Sessions in Nov 2017
4	Stair Case Improvement	EHS / Facilities (Rowena)	Item 1-2 : Q3	
	1. All steps to be affixed with anti slip strip.		Item 3 : Q4	-Closed- end Dec 2017
	2. Establish change frequency of anti slip strip.			- Yearly and as and when needed
	3. Stair case addition side railing review			-Closed
5	SIT : Spot, Report, Prevent campaign II	SIT (CC)	Sep	-Closed-30 Nov 2017 email of winners
6	EHS Carnival game on STF topic	T&P (Yeo)	Nov	-Closed
7	Yearly refresher package in EHS training portal on STF awareness with quiz .	Individual Department	Q1'18	-Closed
8	To plan for make-up session for the Safety Consciousness & Self Awareness program for those whom did not attend.	EHS	Q4 2017	Closed- conducted 8 sessions in Nov 2017 - Total participants who attended the Talk: 1127 pax and 160 pax missed to attend the Talk
9	Review to determine and standardize what type of friction tape/strips that works for our staircases.	EHS	WW47	Closed and installed on all staircases
10	To incorporate a survey in understanding the type/condition of shoe for every trip, slip and fall accident	EHS/SIT	WW47	Closed. Survey form Established
11	Poster on walking habit	SIT	WW44	Closed - posted during EHS Carnival
12	Include in the monthly inspection the checking on staircases	EHS	Q4 2017	Closed - included in Dec PSD and Dec safety inspection
13	EHS banner stating the goal to eliminate slip, trip and fall in the workplace	T&P	WW44	Closed - posted during EHS Carnival
14	Provide flyers to employees on good walking habit during EHS Carnival	SIT/T&P	WW44	Closed - posted during EHS Carnival
15	Include the walking habit and staircase guideline posters in the EHS Carnival	EHS/SIT	WW44	Closed - posted during EHS Carnival and posted on doors leading to staircases
16	Feasibility study on locker relocation to level 1	EHS/SIT	WW47	Not required based on video assessment.

### 3. EHS Performance - EHS KPI/Objective & Target Status (2017-2018)

#### F. Safety Improvement

Items	2018 Targets & Objectives	Descriptions	Status (as of 2018 May)
1	Slip Trip Fall Improvement	DF hook-up safety improvement phase 3 /4 GGI/Saber Improvement	Phase 3 completed Phase 4 On-going .Completed by Q3 GGI/Saber Effort in Q4
2	BBS KPI % Safe and Participation	MFG → % Safe 98%	99%
		MFG → Participation : 97%	97%
		Fac/Log → % Safe : 90% (1 <sup>st</sup> Half) , 95% (2 <sup>nd</sup> Half)	99%
		Fac/Log → Participation :95%	95%
3	BBS Observer Training	MFG Production Observer to 35% Facility /Factory Planning Observers at 35%	MFG : 34% F/FP : 36%
4	2018 Slip Trip Fall Program	21 Days Challenge-Developing a Good Safety Habit (Slip, Trip & Fall Prevention)	Completed
5	We Care	Focus on Health on employees	To work with Training & Promotion

## 4. EHS Procedure Updates

- SG-FAC-SWI-018\_AF EHS Training Procedure
  - Update to latest document format
  - Remove form in the procedure and replace with table list of forms
  
- SG-FAC-SWI-006\_B Emergency Response Equipment Inspection\_A  
SG-FAC-SWI-006\_AK Emergency Preparedness and Response Procedure
  - Added item 8.2 specify the requirements of ERT to perform the inspection in a monthly basis.
  - Added emergency response equipment inspection checklists in Appendix 5

## 4. EHS Procedure Updates

➤ SG-FAC-SWI-011A\_A New released form  
SG-FAC-SWI-011\_AD

- Add in 8.3.1 statement on Refer to SG-FAC-SWI-011\_A for the Ladder Inspection Checklist.
- Add in 8.3.1 e) Rungs/steps on metal ladders are not corrugated or knurled
  - f) Spreaders have locking device or mechanism in good condition
  - g) No loose hinges or screws
- Add in 8.3.8 If it is unavoidable to step on the top last two steps, a risk assessment has to be conducted to ensure that a reasonably practicable control measures are in place.
- Add in 8.3.10 and the base are not worn out or damaged.
- Added table list of form

## 4. EHS Procedure Updates

### ➤ **SG-FAC-SWI-007 Procedure for EHS Buy-Off of New Equipment**

- Update procedure and form template format.
- Removed Appendix in 13.3 and changed to table for the list of checklist for equipment buy-off

### ➤ **SG-FAC-SWI-009 In house Safety Rules and Regulations**

- Good Walking Habit and Staircase Safety
- Walk briskly. Never run.
- Pay careful attention to your steps. Put your mobile device away. Avoid distractions.
- Take small careful steps if the floor surface is rough, cluttered, slippery or at an angle.
- Use proper footwear and wear them correctly.
- When using the material lift, place your materials inside the lifter and close the lifter door. If a safety chain is available on the lifter, ensure to lock the chain before closing the door. Press the “up” or “close” button. Do not force to open the door while the lifter is moving. Doors are installed with interlocks.



## 4. EHS Procedure Updates

- **SG-FAC-SWI-041 Process Safety Hazard Identification**
  - Separate HAZOP logsheet from the main procedure
- **SG-FAC-SOP-002 Environmental Health & Safety Manual**
  - Updated EHS Policy and Energy, Water and Waste Policy with the new signed policies

## 4. EHS Procedure Updates



### What is a Near Miss?

An incident where no injury and ill health occurs, but has the potential to do so

### How to Report a Near Miss?

- 1) Email to EHS [dl-Lumileds-SGP-EHS@lumileds.com](mailto:dl-Lumileds-SGP-EHS@lumileds.com) or
- 2) Submit Facility Incident Report  
<http://sggysnysn1ws012/lumiledsnewui/Forms/frmFIR.aspx>

## 5. MBB IH Monitoring

Personal Sampling	Parameter	Standard	Jun-18	Jun-18	Jun-18
		mg/m3	20-Jun	21-Jun	27-Jun
MBB 8 and 12	Total Dust	5	1.33	0.07	1.23
	Amorphous Silica	0.05	0.027	0.003	0.019
	Respirable Dust	1.5	0.32	0.38	0.16
MBB 17 and 9	Total Dust	5	0.07	0.45	0.2
	Amorphous Silica	0.05	0.032	0.015	0.015
	Respirable Dust	1.5	0.24	1.74	0.2
Sieving and Production	Total Dust	5	0.61	1.55	0.22
	Amorphous Silica	0.05	0.003	0.001	0.021
	Respirable Dust	1.5	0.21	0.01	0.35

Findings: Generally, all measured parameters were less than the Permissible Exposure Limit set by MOM except for the Respirable Dust at MBB 17&9.

## 6. Other Matters



### LUMILEDS SAFETY CROSS

Department/Section:

Month/Year:

			1	2			
			3	4			
			5	6			
			7	8			
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
			25	26			
			27	28			
			29	30			
				31			

**Legend:**

No Accident<sup>1</sup> Reported

Near Miss<sup>2</sup> Case Report

Occurrence of Accident



**Definitions:**

1 Accident refers to an incident that has given rise to injury, ill health or fatality.

2 Near Miss is an incident that does not incur injury or ill health, but has the potential to do so

## EHS COMMITTEE INSPECTION PLAN CY 2018

Note: Respective offices are included in the scope of inspection

No.	Department / Area	Contact Person	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
			Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
1	GGI 1	Victor Oh	Group 1			Group 2			Group 3			Group 4		
2	GGI 2	Victor Oh												
3	GGI 3	Victor Oh												
4	Overmold	Victor Oh	Group 2			Group 3			Group 4			Group 5		
5	Saber VI	Karen Sim/Hong Yen												
6	Die Bank	Teo, Wee Siang												
7	GGI Lot start	Victor Oh												
8	GGI Maint Room	Victor Ting	Group 2			Group 3			Group 4			Group 5		
9	Saber (L4)	Karen Sim/Hong Yen												
10	MBB	Karen Sim/Hong Yen												
11	Wafer Fab	Low Chun Wai/Teng/KT/Mike		Group 3			Group 4		Group 5			Group 6		
12	Plating fab (L4)	Saw San/Zhang Liang												
13	Die Fab (L3)	Low Chun Wai/Teng/KT/Mike												
14	WSS Recycler	Jovy/Siva		Group 4			Group 5		Group 6			Group 1		
15	Thinning	Vinoth Kumar												
16	OQA	Henry												
17	Wafer Test	Thu Kyaw / Sundar												
18	Chemical Warehouse	Eric Chong/Rey Cortez			Group 5			Group 6			Group 1			Group 2
19	Logistics	Huang He												
20	IQA	Markus Tan / Roel												
21	Medical Clinic	Nurse on Duty												
22	Canteen (HR)	Siang Tee/Vincent			Group 6			Group 1			Group 2			Group 3
23	Facility / subfab	Kow/Edwin/Anan/Too												

	<b>Group 1</b>	<b>Group 2</b>	<b>Group 3</b>	<b>Group 4</b>	<b>Group 5</b>	<b>Group 6</b>
Leader	<b>Low Chun Wai</b>	<b>Chua KT</b>	<b>Victor Oh</b>	<b>Tay Hong Yen</b>	<b>Edwin Yeo</b>	<b>Ng Poh Chay</b>
Assistant L	<b>Lim Wei Hong</b>	<b>Desmond</b>	<b>Vinoth Kumar</b>	<b>Chong Poh Fuei</b>	<b>Ng Tee Joo</b>	<b>Sundar / Thu Kyaw</b>
Members	Ooi Bee Suet Yeo Kok Siong Soh Wei Ming Abdul Halim EHS Officers	Tang Sai Meng Liu Siew Leng Steven Zin Low Ling Chay EHS Officers	Lee Tsu Fern Abdul Ghani Won Pick Hong Amirrudin Edwin Roy Navakeerthy EHS Officers	Kanimoli Vijay Ong Pei Ing Chen Lin / Roger Ben Wong Bryan Tee Kian Hock EHS Officers	Muru Eric Chong Dian Farhana Looi Yong He Chang Hua EHS Officers	Huang Helly Qingsong Weng Bey Kuan Chiek Mahesh EHS Officers





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