

SCOPPE



SCOPE EDITORIAL COMMITTEE

- Tan Tee Hong Lincoln Lee Tan Guan Aun Loh Sing Keong
- Cerine Lim Jessica Tan Low Kok Tong







PCS CONTRACTORS 2 QUARTERLY DIALOGUE SESSION 5







management, staff and workers were gathered at the Merbau room on 13 June 2017 for the 2nd Quarterly PCS Contractors Dialogue session.

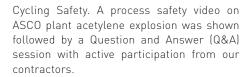
n his opening address, PCS MD Mr Akira Yonemura thanked the many contractors senior management present for demonstrating their strong commitment to our Health, Safety and Environment (HSE) culture. He shared that 2016 had been a satisfactory year with no Lost Time Incident (LTI), and injury-free Shut Down Maintenance with no Recordable Case for the second time and 35 million hours worked without LTI on 18 August 2016. This year our Naphtha Import Facilities (NIF) project achieved 1 million hours worked without LTI on 3 April. He reminded everyone that while we have performed well, we must never rest on our laurels. We need to continue to adopt a multi-pronged approach to a sustainable excellent HSE performance. For every work decision we make, we need to understand and appreciate the value of a healthy and safe work place, protect our facilities and the environment to ensure the safety and health of our workforce. Speaking Out for Safety (SOS), Stop and Report, Behaviour Base Safety and Near Miss sharing for lessons learnt, continue to be the driving programmes with best safe work practices and procedures in place. Concluding, he reminded everyone that we all have a collective responsibility to guarantee the safety and health of our workforce.

Next, PCC KYC Scaffolding HSE Manager Mr Gerry Munoz presented a safety talk on Working at Height Safely. PCS Manager Mr Quek Tee Feng presented the HSE Performance Review and a safety talk on











After the Q&A session, PCS DMD Mr Lim Wee Chiong gave the closing address. The event ended with the participants enjoying the net-working buffet lunch provided.

BBS TRUST CHAMPION TRAINING



A John - HSE

Behaviour Based Safety (BBS) Champion Concept was introduced in year 2007 and reviewed in March 2009, to broaden and spread Function Capacity Building to shop-floor personnel with Champions taking key role in educating and ensuring safe behavior within their Functions

he TRUsT Champion concept is aimed to create a pool of special observers or "Champions" who promote positive safe behaviors and role models for employees and contractors. The TRUST Champions are selected by Functions and appointed by General Manager (Plant) to perform the role for a period of one year. Before taking on the role, the Champions undergo a one day Champion training conducted by HSE Officers to align them with their roles and responsibilities. This



commented in the opening address "For unsafe human behaviour, there is no quick restart button and we need time to correct it. The company nowadays is focusing on another aspect of safety – process safety, but that does not mean the emphasis on BBS is lost. As our BBS Champions, your role is to continue driving the initiative and promote BBS to your colleagues. Ultimately you can change their attitude and behaviour to focus on safety".

year's training was held on 2nd May 2017 at the Parkroyal Hotel, Kitchener road.

The training session was comprehensive covering topics ranging from:

- BBS introduction in PCS,
- BBS TRUsT Champion Concept,
- Role of BBS Champion,
- The Art of Giving Effective Feedback,
- Quality BBS Submission, video viewing and practical exercises.

At the end of the session, all incoming Champions received appointment Letters and "Champion Sticker".

The "Champion Sticker" is pasted on the safety helmet instead of uniforms. The

main purpose of the "Champion Sticker" is to differentiate the "BBS TRUST Champion" from other BBS observer and facilitate their work of submitting quality BBS observation.



New Champion sticker to be pasted on safety helmet

TRUST CHAMPION TRAINING PROGRAM

Module 1: Introduction

- 1.1 Opening address by Facilitator
 - Mr Ho Jia Quan
- 1.2 Self introduction
- 1.3 BBS Introduction- The Early Years
- 1.4 TRUsT Champion Concept

Module 2: Role of Champions

- 2.1 Appearance
- 2.2 Roles and Responsibilities
- 2.3 Capacity Building (Exercises session by Champions)
- 2.4 Video viewing- The Art of Giving Effective Feedback

Module 3 : Quality BBS Submissions (QBS)

- 3.1 Outline of Quality BBS Submissions
- 3.2 Incentive Scheme
- 3.3 QBS Exercise

Module 4: Expectations

- 4.1 Video viewing
 - BBS and SOS video
- 4.2 Group discussion with Function focal point
- 4.3 Closing address by Mr Lim Kian Huat



Mr Lee Chew Pen (BBS committee member & PCC Champion) shared on how to capture a good picture for quality BBS observation (QBS).



Participants listening attentively to trainers.



Mr Lim Kian Huat in his closing speech quoted several past incidences in PCS and through BBS contributed to the current good safety statistics



Group photo of the Champions and members of the BBS steering committee

BBS TRUsT CHAMPION AWARD for 2016/17



A John - HSE

s part of PCS's on-going efforts to sustain BBS, an annual commendation award was given to outstanding BBS TRUsT Champion. These outstanding Champions were selected amongst all the Champions based on the criteria set by the BBS Steering Committee who awarded points for their effort in the QBS submissions. The criteria includes:

- 1. Consistent effort in submitting the Quality BBS (QBS),
- QBS selected as top five submission for each quarter,
- QBS selected for PCS in-house HSE bulletin from the top 5 selected each quarter
- 4. No safety violation and their excellent work in promoting BBS TRUsT.

During his tenure as BBS TRUsT Champion from 2016 to 2017, Mr. Ng Teo Hong from Olefin-I had shown excellent dedication. His QBS were amongst the best selected every quarter for year 2016/17 and came out overall highest in term of points score. For his effort and dedication, he was selected as the best BBS TRUsT Champion for 2016/17. A plaque and \$100 NTUC vouchers were presented to him by PCS GMP Mr Lucas Ng during a simple ceremony at PCS administrative building on 09 Jun 2017.





BBS TRUsT CHAMPION 2016/17







Tan Hua Cheng

Ng Teo Hong

Michael B Majit







Vignesh A C

Faisal B Arifin







Seah Soon Liang

Tan Kay Chaun









Amin B Ahmad

Some examples of QBS submitted by BBS TRUsT Champions for 2016/17













QBS by Ng Teo Hong

- CBI 3.3 Ladder, Stairway and Scaffolding

Observation:

While (Task): While going on board vessel. Was (At-Risk): Falling.

Because (Barrier): Thought it is ok to step on

Intervention Carried Out: Told to wait for ship's crew to put up ladder.

QBS by Md Amin B Solehan - 1.1 Line of Fire

Observation

While (Task): Transporting pipe to awaiting

Was (At-Risk): Work directly below the moving object.

Because (Barrier): Complacent. Intervention Carried Out: Always keep a distance away as to prevent unexpected event.

QBS by Lee Chew Pen - CBI 3.4 Hose Handling

Observation:

While (Task): Doing hacking.

Was (At-Risk): Air hose may disconnect. Because (Barrier): Not aware can get

body injury.

Intervention Carried Out: The work was stopped and fitted with whip arrestor.

NFEC FIRE SAFETY SEMINAR 2017



Christopher Heng





Er Lucas Ng, General Manager (Plant) of Petrochemical Corporation of Singapore (Private) Limited (PCS) was invited to speak at the NFEC Fire Safety Seminar 2017 organised by the National Fire and Civil Emergency Preparedness Council (NFEC) and supported by the Singapore Civil Defence Force (SCDF).

ver 900 Fire Safety Managers (FSM), professionals and fire safety advocates from various industries

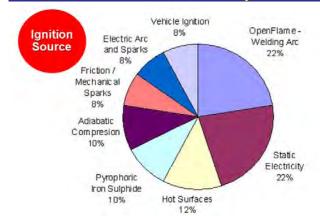
attended this seminar that took place at the Marina Bay Sands Convention Centre on the 29th June 2017 which was graced by DC Chong Hoi Hung, Deputy Commissioner of SCDF. The theme of this seminar was "PREPARE, PREVENT, RESPOND" and aimed to highlight the importance of making the workplace fire safe for all and the role of the Fire Safety Managers in making this a reality.

In his presentation, Er Lucas Ng shared on the types of ignition sources typically present and the control methods used in the Oil and Gas Industries. He refreshed audience on the fundamentals of fire safety regarding Fire Triangle and Fire Tetrahedron. He shared on PCS's experience of managing fire risks and equipment reliability. He reminded that all it takes is "A Single Spark to start a Huge Blaze". As equipment deteriorates over time, it is important to have a comprehensive maintenance program to tackle these problems.

As part of emergency preparedness, Er Lucas Ng highlighted the importance of continuous training for all CERT responders. Through various internal training, drills and exercises with government agencies such as SCDF and SPF, PCS constantly reviews and improves on our CERT competencies. In addition, we have a team of Industrial Fire Brigade members to support in fire prevention, emergency planning and response.

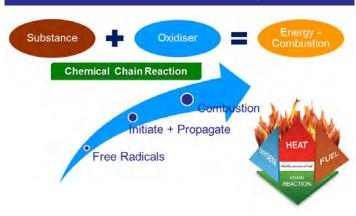
In his closing, Er Lucas Ng urged all individuals to "Always be Prepared, Eliminate Ignition Source and Stop Release, in Alleviating all Potential Emergency Situations" in their workplace.

Types of Ignition Sources Identified in Website Case Studies - In Oil and Gas Industry



Source: https://webapps2.ucalgary.ca/~ursenbac/hazards/ignition_sources.php

Fire Tetrahedron of Fire Pyramid



 $Source: \underline{https://en.wikipedia.org/wiki/Fire_triangle}$

SHARING THE BEST PRACTICES

- IIth Annual Responsible Care Global Meeting



Joyce Lee Marketing / Sales

The Annual Responsible Care ("RC") Global Meeting organised by Sumitomo Chemical Co., Ltd ("SCC") was held on 29th and 30th May 2017 at its head office in Tokyo. It was attended by 44 representatives from 36 SCC-affiliated companies. Christopher Heng (F&S) and I represented PCS in this annual event.





epresentatives came from several parts of the world, such as Australia, China, France, Italy, Malaysia, Taiwan, Thailand and the USA. It was thus a logistics challenge for the SCC RC department to cater to the various languages and diet preferences. It was efficiently organized as we were assigned WiFi passwords, given earphones for the Japanese-to-English/Chinese translation service (almost 80% of the presentation were in Japanese), offered coffee/tea breaks with delectable snacks, and given JPY1200 prepaid cards for our lunch at the staff cafeteria, not to mention dedicated transport and individual maps to the restaurant for the Welcome Party.

The 2-day meeting started with an opening speech by Mr Y Kitaura, SCC Managing Executive Officer, who reiterated the SCC Ground Rules for Occupational Health and Safetv :

- Think Before You Act
- Help each other to be more aware of unsafe acts
- Do not place hands in and around areas of working machinery/equipment

These Ground Rules, translated into six languages, were introduced to and adopted by all SCC affiliates worldwide. We saw more of these signages displayed prominently when we visited the plant at Chiba Works on the third day.

The theme for 2017 is "Share the Best Practices" and SCC RC department's various

groups led the way by sharing their 2017 activity plans, Best Practices etc. Besides speeches, we had the chance to attend two different workshops each for better engagement and sharing. I attended the "Sustainability" and "Chemical Safety" workshops as these are more related to Product Stewardship while Christopher attended "Process Safety and Loss Prevention" and "Quality Assurance". Indeed, in smaller groups, we were better able to understand different companies' RC activities and global trends in regulations.

The Welcome Party hosted by SCC on the first night allowed all participants to mingle freely over drinks and finger food. There were some light moments when the crowd was guizzed on the Ground Rules, yet again emphasing its importance in the SCC culture.

On the second day, RC Awards were presented to 17 recipients for their projects that showcased their efforts in Environment Management, Chemical Safety Management, Quality Assurance etc. Presentations on the projects were made by 10 award recipients while seven awardees shared their findings on posters.

The third day saw the 44-strong entourage taking a chartered bus to Chiba Works. Although SCC's ethylene plant had been shut in 2015 after operating for 40 over years, it continues to procure all of its requirements of ethylene and other basic petrochemical

feedstock from Keiyo Ethylene. Keiyo Ethylene is 45% owned by SCC, thus enabling SCC to continue producing downstream derivatives.

We were first shown a comprehensive corporate video detailing SCC's history. It was a proud moment for Christopher and me when many poignant scenes of PCS (from days of pre-PCS 1 to current PCS 2) flashed across the wall screen, well before any other foreign projects were undertaken by SCC.

We then visited an Aromatics plant producing MetaDiol ("MDO"), the Research and Development Lab and ended with sharing by the MDO plant manager on its implementation and challenges of RC activities in the plant.

In all, it had been an enriching 3-day learning from the SCC affiliates and SCC RC department, who were all very generous in sharing their knowledge and experience. It was also heartening to know that our shareholder is supporting the United Nations' Sustainable Development Goals (SDGs)* and has clearly-spelled out policy and action plans on Corporate Social Responsibility, both of which are engagements that require

Kudos to the SCC RC department as every event was planned to the most minute details and executed well, making the 2017 Global Meeting another success.

*On 25th September 2015, all 193 Member States of the United Nations adopted a plan for achieving a better future for all. At the heart of "Agenda 2030" are the SDGs and 17 goals were established so that we can solve global scale problems such as poverty, food, health, education, gender equality, environment, energy and climate change. Each goal has specific targets to be achieved over the next 15 years.



REGIONAL OLEFIN PRODUCERS ECHNICAL COMMITTEE (ROPTC) ERENCE 2017













Hosted by JG Summit Petrochemical Corporation (JGSPC), the 20th Regional Olefin Producers Technical Committee (ROPTC) Conference was held in Manila, Philippines from 8-10 May 2017. The theme of the conference was focused on Operational Excellence: Driving the Path to Sustained Profitability.

raditionally, the conference is held in different ASEAN countries on a rotating basis amongst the committee members and serves as a platform for the exchange of latest technical information, presentation of new developments and bridging the gap among different petrochemical companies in the region.

This year, over 100 executives and engineers of leading petrochemical companies in ASEAN gathered at the conference, showcasing their approach to resolve issues encountered during plant operations in a series of technical discussions.

Led by Mr Lucas Ng, General Manager (Plant), and chairman of ROPTC, PCS delegates also contributed to the conference

with various interesting presentations. Mr Marcus Chia, Mr Ngai Jia Ming and Ms Jessica Tan presented on the topics titled "Plant Digital Transformation via Wireless Field Instrumentation in PCS", "Caustic Scrubber Decontamination" and "Temperature Increase During Molecular Sieve (MS) Unloading" respectively.

The topic presented by Mr Marcus Chia, which focused on the types of wireless infrastructure setups in our process plants, tank farms and potential future expansion of wireless applications as part of digital transformation process, generated huge amount of interest from the panel judges. His fluency during the presentation, coupled with the ability to maintain his composure in answering difficult questions raised by members, gave him an advantage over

other regional presenters. With his stellar performance, he was eventually presented with the Best Presenter Award at the closing ceremony, which did not come as a surprise

The last segment of the conference included concurrent plant dialogue sessions (cold section and hot section), where the cold section was chaired by Mr Ng Chee Wai, Technology & Optimization Manager. Within the limited time frame, Mr Ng managed to manoeuvre through the huge number of prepared questions and answers (Q&As) with ease, addressing issues raised by respective companies and seeking clarifications along the way. It was a fruitful discussion among the participating representatives.

In the closing address, PCS GM (P) commended JGSPC organizing committee for their effort and looked forward to see more petrochemical companies in the region coming onboard, facilitating the sharing of useful information and knowledge. The conference was concluded with the handing over from JGSPC to Chandra Asri Petrochemical (CAP), who will be tasked to organize the 21st ROPTC conference in 2018.















Chong Hon Yeng T&O, Plant Services

DBS MARINA REGATTA

DRAGON BOAT COMPETITION

PCS Dragon Boat Team 'Spitfire' took part in the DBS Marina Regatta dragon boat competition on 4 June 2017. The regatta, held at The Promontory at Marina Bay, is Singapore's biggest water sports festival. The dragon boat race is just but one of many events of the DBS Marina Regatta. The competition, organised in partnership with the Singapore Dragon Boat Association (SDBA), saw an estimated 90 teams and more than 3,000 athletes battling out against the backdrop of the iconic Marina Bay skyline.

ur team, led by Team Manager Dominic and Team Captain Jia Ming, registered to compete in the 12 rowers 200m corporate open race. On that morning, MD, Chief Fire Officer, SSRCC Chairman and other staff came by to give their support.

The first race, just before the high noon, was the heats. Our team came in fourth. Only the first position advanced to the semi-finals, while all other teams had to battle in the repechage race - a trial heat for teams who did not qualify for the semi-finals to have another chance to progress.

As hard as we strived, our gallant efforts were not enough to move on to the next stage. But the competition brought out sheer grit and determination of our team, and also a sense of camaraderie amongst us. The team looks forward to our next race in 29 July 2017 - The Jurong Island Dragon Boat Race.



Nature Walk Reloaded

A Green Sanctuary with Family and **Friends**

I recall a year ago when SSRCC organised a walk at the nature reserves, everyone was overwhelmingly flushed with delight and without hesitation, nudged for an encore. Some may have gotten into the groove and realised that such walks offer not only invaluable benefits (for a small sacrifice), but also rekindle the camaraderie assumed to have been swept away by the drowning rapids of busy lifestyles and knife-edged timetables.

he call did not fall onto deaf ears. On a slightly overcast Saturday morning of 20th May this year, the SSRCC hosted another walk in the forest, or "forestbathing", or shinrin-yoku (the Japanese take topiary as a form of therapy).

About 25 participants made their presence felt with their boisterous burble and lighthearted banter at the Hillview MRT station, where the starting point for the walk was. After a headcount and a short briefing, the group marched enthusiastically along the revamped Rail Mall. A handful certainly went-gaga over the food temptation along the stretch.

Thereon, walking precariously on somewhat broken paths and scattered ballasts, everyone drew a huge smile for a group shot on the rail tracks with the Malayan Railway's prominent vestige, the Bukit Timah rail bridge, in the background. One for memory's sake, surely.

The next stopover was at the secluded quarry, only the curious lot would discover. The whole landscape was bathed in the warm glow of the rising sun and dews on the blades of grass sparkled in the sunlight. A snapshot was hurried as perspiration became evidently clear on every countenance. Admittedly, it was a blindingly hot morning and the humidity in the air was a little stiffling



flare by the natural canopies while giving way and space to passing cyclists.

The morning was still piercingly hot at midpoint. The warmth of the surrounding air wrapped around the forested trail like a scarf as we gained distance. Leaves fell and fluttered, suffocated under our feet, with brief wayward wind moaned through the trees. With an oppressive heat hung in the sky, most felt as if their limbs were chained to iron shackles.

Despite the adversity, there was still song in every heartbeat, cheerfulness in every face and spring in every step. "You cannot change what you refuse to confront". We completed the walk in a good time of slightly less than four hours, clocking a distance of almost 14 kilometers. After ample rest at the entranceway of the Singapore Zoological Garden, with hot and spicy KFC meal and chilled Pepsi in hand, the boisterous burble and lighthearted banter resumed in a flash. Obviously, this had been a fun and flamboyant adventure. A champagne of life, so to speak for those who had made the morning worth their while. Two thumbs up for the exuberant energy and exceedingly good camaraderie spirit all around.



PCS NIF PROJECT TEAM BUILDING DINNER

ACHIEVEMENT OF 1,000,000 WORKED-HOURS WITHOUT LTI

Since the inception of the ground breaking ceremony on 22nd March 2016, construction of Naphtha Import Facilities (NIF) is now progressing towards completion soon.

Charlie Chua

With the untiring efforts contributed by JGC Singapore PL and HSL Constructor PL (Joint Venture group), two safety milestones were remarkably achieved by the construction workforce.

- 11th December 2016: 500,000 LTI free safe hours worked
- 3rd April 2017: 1,000,000 LTI free safe hours worked

To inaugurate good progress and safety achievement, a Team Building Dinner was hosted by PCS to enhance bonding session with contractor partners to strive for timely completion with high safety and quality standards.

The Team Building Dinner held on 24th May 2017 at the Chevrons, was well attended by PCS Management, Project Team and Colleagues, together with contractors' management and staff.



Mr. Akira Yonemura-san PCS Managing Director in his opening address...

With the remarkable achievement of the 2nd safety milestone of 1 million hours zero LTI on 3rd April 2017, it is my heartfelt appreciation of all the hard works by JV's / Subcontractors' management staff, as well as PCS' management and staff. The next few months will be critical to the successful completion - please render your cooperation and support for completion of the project safely, with best quality and on schedule.



Mr. Lim Wee Chiong PCS Deputy Managing Director in his inspirational speech...

Achieving the million hours without LTI is a result of a lot of hard work, a lot of "preparedness" from everyone. While this achievement alone does not guarantee success going forward, PCS, HSL and JGC must continue to work as a team and build on the foundation of this million workedhours without LTI to make sure that everyone goes home safely every day for the rest of the project. The inter-dependency and hard work between the 3 parties as a team will be critical in achieving a zero LTI for full duration of the project.



Mr. Charles Quek HSL CEO representing JV EPC contractor speech...

NIF was a project that came during the low oil pricing and at one point of time, it almost didn't materialize. JV was privileged to be awarded this job since both JGC and HSL have been supporting PCS for a long time - partnership is the key. JV has given the commitment to deliver the project timely and safely.











EMPLOYEE NEWS

LONG SERVICE



Presentation on 7 & 12 July 2017

Chen Yizhang	Olefin I
Muhd Sirajuddin b Ghazali	Olefin I
Ngai Jia Ming	Technology & Optimization

10 Years

Liew Hong Chye	Olefin I
Hairil Ashraf b Mohd Amin	Olefin II
Ibrahim b Zakaria	Olefin II
Xie Jinmin Kenny	Olefin II

15 Years

Ng Wee Hong Dennis Fire & Security

20 Years

Velu Pillai s/o Gopalan	Fire & Security
vetu i ittai 3/0 00bataii	I II E & Jecuitiv

35 Years

Choong Hon Fan Peter Main	tenance
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From left : Ibrahim b Zakaria, Ngai Jia Ming, Lucas Ng (GMP) & Velu Pillai s/o Gopalan.



From left: Hairil Ashraf b Mohd Amin, Dennis Ng, Lucas Ng (GMP), Liew Hong Chye & Peter Choong.

NEW EMPLOYEES



Ms Lim Yi Wen Cerin Senior Officer, HR & Admin Joined 1 June 2017 Hobbies: Music, Travelling

Estella Lim



Mr Low Kah Yi Engineer, Maintenance Joined 1 June 2017 Hobbies: Tinkering with gadgets (3D Printers, Andriod devices)



Mr Neo Wei Lun Calvin Engineer, Technology & Optimization Joined 3 July 2017 Hobbies: Soccer, Travelling



Mr Mohammad Irwan bin Mohd Hassan Leading Fireman, Fire & Security Joined 3 July 2017 Hobbies: Jogging, Travelling



BDP



Lam Jian Hang



Koh Samui is unique among Thailand's islands, with distinctive relaxed atmosphere that sets it apart.

An indication of what Samui has to offer comes at its doorstep. Stepping off our flight, we were welcomed into a resort-like airport, a privately-owned, unique, open-air design airport built by Bangkok Airways.

Samui's coastline is almost completely covered with beaches, ranging from the vibrant to one where calm and quietness prevails. We chose to stay in Bophut Beach, one of the most idyllic beaches for its calm atmosphere, and also accessible to the nearby historic Fisherman's Village.

Sun in our eyes, wind over our faces and sand under our feet, we can't possibly lie on the beach or dip in the pool all day long, although the allure of the long yellow sandy beaches and transparent sea water seemed all the more inviting. The main attraction of the island, not far from Bophut Beach, is the Big Buddha.

Big Buddha sits majestically on a small rocky island, connected by a short causeway to the main island. It is one of the island's most popular attractions, and is often the first landmark people see when arriving by air. For trivia fans, the 12-metre high Big Buddha sits in the Mara posture, with the left palm facing up resting on the lap and the right palm facing down, fingers hanging over the knee and grazing the ground. It depicts a time during Buddha's journey to enlightenment. The pose is a symbol of steadfastness, purity and enlightenment.

On an idyllic vacation, where time seemed to stand still, we hopped on a one-day cruise to Ang Thong Marine Park, a protected pristine archipelago of 42 small islands. The islands will surely make the definition of a postcardperfect image of a tropical paradise. The highlight of the day must be cruising back, with the stunning Samui sunset in the background, admired from the comfort of our yacht.











While Samui exhorts itself as the perfect getaway, it is not without present-day indulgences. Central Festival describes itself as the most complete and largest lifestyle shopping complex in Samui, and is obviously located on Chaweng Beach, the most vibrant beach in Samui. And, yes, we got our coffee fix at Starbucks. For our last dinner in Samui, we had to splurge on a place aptly called Dining on the Rocks.

Samui holds fond memories as a nearperfect getaway, for its beauty, clean air and long sandy beaches, nary a crowd.