

**Initial Environmental Examination
(IEE) for
MERCURE YANGON KABA AYE
Hotel and Service Apartment Project**
Yankin Township, Yangon Region, Myanmar

Submitted to
SCCP PRINCE CO., LTD

By
MYANMAR SURVEY RESEARCH

January 2020



သို့

ညွှန်ကြားရေးမှူးချုပ်

ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန

သယံဇာတနှင့်သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဝန်ကြီးဌာန။

နေ့စွဲ ။ ။ ၂၀၂၀ ခုနှစ်၊ ဇန်နဝါရီလ၊ ၁၀ရက်

အကြောင်းအရာ။ ။ ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းအစီရင်ခံစာနှင့်ပတ်သက်ပြီး ဝန်ခံကတိပြုခြင်း။

၁။ အထက်ဖော်ပြပါကိစ္စနှင့်ပတ်သက်၍ SCCP Prince Co. Ltd သည် Mercure Yangon Kaba Aye Hotel and Apartment ကို အမှတ် ၁၇၊ ကမ္ဘာအေးဘုရားလမ်း၊ ရန်ကင်းမြို့နယ်၊ ရန်ကုန်မြို့တွင် ဖွင့်လှစ်ပြီး ဟိုတယ်လုပ်ငန်းများ လည်ပတ်နေပြီဖြစ်ပါသည်။

၂။ ရန်ကုန်တိုင်းဒေသကြီး၊ ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဦးစီးဌာန၊ တိုင်းဒေသကြီးညွှန်ကြားရေးမှူးရုံး၏ ၂၀၁၉ ခုနှစ် မတ်လ ၄ ရက်ရက်စွဲပါ စာအမှတ်၊ ရက-၁/၃/၄ (အီးအိုင်အေ)(၃၈၄/၂၀၁၉) အရ ဟိုတယ်လုပ်ငန်းသည် ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းလုပ်ဆောင်ပြီး အစီရင်ခံစာကိုတင်ပြရမည်ဖြစ်ပါသည်။

၃။ သို့ဖြစ်ပါ၍ အဆိုပါဟိုတယ်လုပ်ငန်းအတွက် ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းပြုလုပ်ရန် Third Party အဖွဲ့အစည်းဖြစ်သည့် Myanmar Survey Research (MSR) ကို ဆောင်ရွက်စေခဲ့ပါသည်။ MSR သည် ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်း (Initial Environmental Examination - IEE) ကိုပြုလုပ်ရန် ကွင်းဆင်း လေ့လာခဲ့ပြီး အစီရင်ခံစာကို သက်ဆိုင်ရာ ဝန်ကြီးဌာနများ၏ ပြဌာန်းထားသောဥပဒေ၊ နည်းဥပဒေများ၊ လမ်းညွှန်ချက်များ၊ လုပ်ထုံးလုပ်နည်းများနှင့်အညီ ရေးသားပြုစုခဲ့ပါသည်။

၃။ SCCP Prince Co. Ltd အနေဖြင့် MSR က ပြုစုရေးသားခဲ့သည့် ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်း အစီရင်ခံစာနှင့် ပတ်သက်ပြီး အောက်ဖော်ပြပါ အချက်များကို ဝန်ခံကတိပြုပါသည်။

(က) ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းသည် တိကျခိုင်မာပြီး ပြည့်စုံမှုရှိပါသည်။

(ခ) ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းကိုပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းလုပ်ထုံးလုပ်နည်း အပါအဝင်သက်ဆိုင်ရာဥပဒေများ၊ပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းပြုလုပ်ရန် လုပ်ငန်းတာဝန်များနှင့်အညီတိကျစွာ လိုက်နာဆောင်ရွက်ပြုစုထားပါသည်။

(ဂ) ဤကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းအစီရင်ခံစာပါ ကတိကဝတ်၊ ပတ်ဝန်းကျင်ထိခိုက်မှု လျှော့ချရေး လုပ်ငန်းများနှင့်အစီအစဉ်များကို အပြည့်အဝအစဉ်အမြဲလိုက်နာဆောင်ရွက်မည်ဖြစ်ပါကြောင်း ဝန်ခံကတိပြုပါသည်။

လေးစားစွာဖြင့်

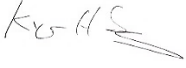



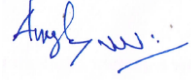





for 
Mr Lee Jing Yang
Director
SCCP Prince Co. Ltd

Submission of Documentation

We, Myanmar Survey Research (MSR) Co., Ltd., hereby submit this Initial Environmental Examination Report for Mercure Yangon Kaba Aye Hotel and Service Apartment project which is located at No.17, Kabar Aye Pagoda Road, Yankin Township, Yangon Region. To our best knowledge, the information contained in this report is accurate and truthful, representing all findings related to the project.

Signed at Yangon on 1st January 2020.

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ACRONYMS AND TERMS**ACRONYMS**

1 st	First
4 th	Fourth
5 th	Fifth
8 th	Eighth
ASEAN	Association of Southeast Asian Nations
ASL	Above Sea Level
BCR	Building Coverage Ratio
BOD	Biochemical Oxygen Demand
°C	Degree Celsius
CaCO ₃	Calcium Carbonate
Co., Ltd.	Company Limited
CFC	Chlorofluorocarbon
CO ₂	Carbon Dioxide
COD	Chemical Oxygen Demand
CQHP	Committee for Quality Control of High-Rise Building Construction Projects
CSR	Corporate Social Responsibility
dBA	Decibel
Dy	Deputy
E	East
ECC	Environmental Compliance Certificate
ECD	Environmental Conservation Department
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
ESE	Electricity Supply Enterprise
ESIA	Environmental and Social Impact Assessment
FAR	Floor Area Ratio
Ft	Foot/Feet
G	Gram
GDP	Gross Domestic Product
HCFs	Hydrofluorocarbons
HCFCs	Hydrochlorofluorocarbons
HD TV	High Definition Television

HIA	Health Impact Assessment
HP	Hand phone
HR	Human Resources
HRS	Hours
HSD	High Speed Diesel
HVAC	Heat Ventilation Air Condition system
IEE	Initial Environmental Examination
IFC	International Finance Corporation
ILO	International Labour Organization
INGO	International Non – Governmental Organization
K	Potassium
Kg	Kilogram
km	Kilometre
KVA	Kilo Voltage Ampere
kW	Kilo Watt
M	Meter
m ³	Cubic meter
MBBS	Bachelor of Medicine and Bachelor of Surgery
MDGs	Millennium Development Goals
MIC	Myanmar Investment Commission
mm	Millimetre
MM	Modified Mercalli
MMK	Myanmar Kyat
MOECAF	Ministry of Environmental Conservation and Forestry
MONREC	Ministry of Natural Resources and Environmental Conservation
mph	Mile per hour
MPH	Master of Public Health
MSL	Mean Sea Level
MSR	Myanmar Survey Research
MST	Myanmar Standard Time
mg/l	Milligram per liter
N	North
N	Nitrogen
NaCl	Sodium Chloride
No.	Number
NEQG	National Emission Quality Guideline

NO ₂	Nitro Dioxide
NRC	National Registration Card
NSDS	National Sustainable Development Strategy
NTU	Nephelometric Turbidity Unit
P	Phosphorus
PM	Particulate Matter
PPE	Personal Protective Equipment
RC	Reinforced Concrete
RS	Richter Scale
sq m	square meter
SIA	Social Impact Assessment
SOPs	Standard Operation Procedures
SS	Suspended Solid
TEL	Telephone
TVOC	Total Volatile Organic Compound
UN	United Nations
UNCED	UN Conference on Environment and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
WBG	World Bank Group
WHO	World Health Organization
YBS	Yangon Bus Services
YCDC	Yangon City Development Committee
YGN	Yangon

Terms

U	“U” is an honorific placed before the name of a male adult. It is an equivalent of “Mr.” It does not say whether the person addressed is single or married.
Daw	“Daw” is an honorific placed before the name of a female adult. It does not say whether the person addressed is single or married.
Ma	“Ma” is used to address a female child or a young lady. Women of same age— young or old—also address each other using this honorific. Especially older persons use this address for younger persons.

Ko	“Ko” is used to address a young man. Men of same age—young or old—also address each other using this honorific. Older persons also use this address for younger persons.	
pyi	Myanmar volume measuring unit. There are 16 pyi’s in a basket. There are 8 tin-fuls in a pyi. (tin = condensed milk tin)	
viss	Myanmar weight measuring unit: One viss is equal to 3.6 pounds or 1.65 kilograms.	
Basic Education System in Myanmar		
Primary School	= Elementary School	1 st Grade (Kindergarten)
		2 nd Grade
		3 rd Grade
		4 th Grade
		5 th Grade
Middle School	= Lower Secondary School	6 th Grade
		7 th Grade
		8 th Grade
		9 th Grade
High School	= Upper Secondary School	10 th Grade
		11 th Grade (Matriculation)

EXECUTIVE SUMMARY (Myanmar)

အစီရင်ခံစာ အကျဉ်းချုပ်

နိဒါန်း

စင်္ကာပူနိုင်ငံအခြေစိုက်သော SCCP Prince Co. Ltd သည် Mercure Yangon Kaba Aye Hotel and Service Apartment စီမံကိန်းကို တည်ထောင်ပြီး လုပ်ငန်း ဆက်လက်လည်ပတ်သွားနိုင်ရန် အဆိုပြုလျှောက်ထားခဲ့သည်။ ယင်း Mercure Yangon Kaba Aye Hotel and Service Apartment သည် ယခင် က Micasa Hotel Ltd မှ ဖွင့်ထားခဲ့သည့် Micasa Hotel Apartments ဖြစ်ပါသည်။

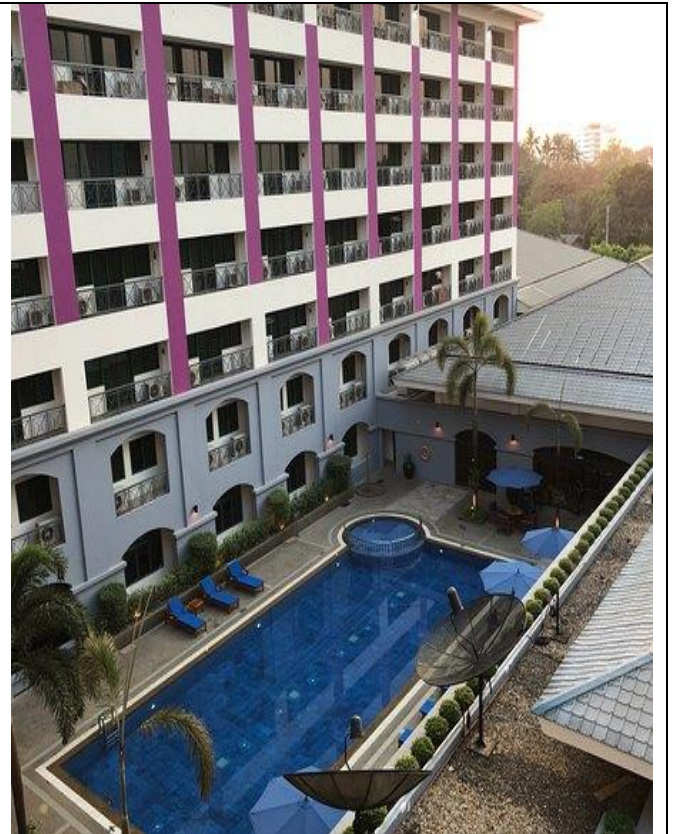
SCCP Prince Co. Ltd သည် စီးပွားရေး အဖွဲ့အစည်း အမည်ပြောင်းပြီး ဟိုတယ်နှင့်လူနေခန်း ဝန်ဆောင်မှု လုပ်ငန်းကို ဆက်လက်ဆောင်ရွက်လည်ပတ်နိုင်ရေးအတွက် စီစစ်သုံးသပ်ရန် မြန်မာ့ရင်းနှီးမြှုပ်နှံမှု ကော်မရှင်သို့ ၁၆ ဒီဇင်ဘာ ၂၀၁၉ တွင် လျှောက်ထားခဲ့သည်။ မြန်မာ့ရင်းနှီးမြှုပ်နှံမှုကော်မရှင်မှ ချမှတ်ထားသော သတ်မှတ်ညွှန်ကြားချက်များ အရ SCCP Prince Co. Ltd သည် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးကို သေချာမှုရှိစေရန် ရည်ရွယ်လျက် ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းလုပ်ငန်းနှင့် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှု အစီအစဉ်ကို ရေးဆွဲ ဆောင်ရွက်ရပါမည်။

ဤစီမံကိန်းနှင့် ပတ်သက်၍ သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဌာနမှ ချမှတ်ထားသော လမ်းညွှန်ချက် လုပ်ထုံးလုပ်နည်းများအတိုင်း ကနဦးပတ်ဝန်းကျင် ထိခိုက်မှုစစ်ဆေးခြင်းကို ဆောင်ရွက်ရန် သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဌာန (Environmental Conservation Department, ECD) မှ ချမှတ်ပေးခဲ့သည်။ ECD ၏ မှတ်ချက်အတိုင်း အကောင် အထည်ဖော်ရန် SCCP Prince Co. Ltd သည် စီမံကိန်းကြောင့် ဖြစ်နိုင်ခြေ ရှိသော ပတ်ဝန်းကျင်ဆိုင်ရာသက်ရောက်မှုများကို ရှာဖွေရန်၊ ကနဦးပတ်ဝန်းကျင် ဆန်းစစ်ခြင်းလုပ်ငန်း ဆောင်ရွက်ရန် Myanmar Survey Research Company အား တာဝန်ပေးခဲ့သည်။

ဤ ကနဦး ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း အစီရင်ခံစာသည် Mercure Yangon Kaba Aye Hotel and Service Apartment ကို တည်ထောင်ပြီး လုပ်ငန်းလည်ပတ်လုပ်ကိုင်မှုကြောင့် ဖြစ်ပေါ်လာနိုင်ခြေရှိသည့် ပတ်ဝန်းကျင်ဆိုင်ရာ ထိခိုက်နိုင်မှုအပေါ် စစ်ဆေးခြင်းမှ တွေ့ရှိချက်များကို တင်ပြထားခြင်းဖြစ်ပါသည်။ Myanmar Survey Research (MSR) မှပညာရှင်အဖွဲ့က ဤစစ်ဆေးတွေ့ရှိချက်အစီရင်ခံစာကို သဘာဝပတ်ဝန်းကျင် ထိန်းသိမ်းရေးဌာန၊ သဘာဝပတ်ဝန်းကျင်ထိန်းသိမ်းရေးနှင့်သစ်တောရေးရာဝန်ကြီးဌာနမှ ချမှတ်ထားသောလုပ်ထုံးလုပ်နည်းအတိုင်း ပြင်ဆင်ထားသည်။

စီမံကိန်း အကြောင်းနှင့် တည်နေရာ

Mercure Yangon Kaba Aye Hotel and Service Apartment အမှတ် ၁၇ ကမ္ဘာအေးဘုရားလမ်း၊ ရန်ကင်းမြို့နယ်၊ စိမ်းလွဲမေ ရိပ်သာလမ်းဒေါင့် တွင်တည်ရှိပါသည်။



စီမံကိန်းတည်နေရာပြသည့်မြေပုံ နှင့် စီမံကိန်း လည်ပတ်ပုံ

အဆောက်အဦသည် ကြမ်းခင်းဧရိယာ ၁၇,၉၈၈ စတုရန်းမီတာရှိသည်။ ဟိုတယ်သည် အာရ်စီ အထပ် ၇ထပ် ရှိပြီး တည်းခိုခန်းပေါင်း (၁၈၄)ခန်း နှင့် စားသောက်ဆိုင်၊ ရေကူးကန် တို့ပါဝင်သည်။ စီမံကိန်း၏ စီးပွားရေး လုပ်ငန်းတွင် MiCasa Restaurant & Bar၊ အဆောက်အဦပြင်ပရေကူးကန်၊ ကလေးရေကူးကန် နှင့် ကျန်းမာရေး လေ့ကျင့်ခန်း အားကစားခန်းမတို့လည်း အပါအဝင်ဖြစ်သည်။

စီမံကိန်းအကြောင်း အကျဉ်းချုပ်

စီမံကိန်းအမည်	Mercure Yangon Kaba Aye Hotel and Service Apartment
စတင်တည်ထောင်သည့် နေ့စွဲ	၇-၈-၂၀၁၅
လုပ်ငန်းပိုင်ရှင်	SCCP Prince Co. Ltd
လိပ်စာဆက်သွယ်ရန်	အမှတ် ၁၇၊ ကမ္ဘာအေးဘုရားလမ်း၊ ရန်ကင်းမြို့နယ်၊ ရန်ကုန်။ + 951 8650933
စီမံကိန်းတည်နေရာ	အမှတ် ၁၇၊ ကမ္ဘာအေးဘုရားလမ်း၊ ရန်ကင်းမြို့နယ်၊ ရန်ကုန်။
စီမံကိန်းဧရိယာ	၁,၉၄၄ ဧက
အဆောက်အဦဧရိယာ	၁၇,၉၈၈ စတုရန်းမီတာ
အဆောက်အဦအမျိုးအစား	အာရ်စီ ၇ ထပ်
အခန်းအရေအတွက်	၁၈၄ ခန်း
ရပ်နိုင်သော ကား အရေအတွက်	၅၀ စင်း

မူဝါဒ ဥပဒေနှင့် အဖွဲ့အစည်းဆိုင်ရာ မူဘောင် (Policy , Legal and Institutional Framework)

မြန်မာနိုင်ငံတွင် “ပတ်ဝန်းကျင်ထိန်းသိမ်းရေး ဥပဒေ”ကို ၂၀၁၂ ခုနှစ်တွင် ထုတ်ပြန်ကြေငြာ ခဲ့သည်။ ဤဥပဒေဖြင့် ပတ်ဝန်းကျင်ထိန်းသိမ်းရေးဆိုင်ရာဆောင်ရွက်ချက်များကို လွှမ်းခြုံသက်ရောက်မှုရှိသည်။ ဤဥပဒေနှင့် ၂၀၁၅ ခုနှစ် ဒီဇင်ဘာလ ၂၉ ရက်နေ့တွင် ထုတ်ပြန်ခဲ့သော အမိန့်ကြော်ငြာစာ အမှတ် (၆၁၆/၂၀၁၆) အရ စီမံကိန်း ပြုလုပ် လိုသူသည် ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်းကို သင့်လျော်သော လုပ်ငန်းလိုင်စင်ရှိသည့် တတိယ အဖွဲ့၊ ပုဂ္ဂိုလ် သို့မဟုတ် အဖွဲ့အစည်းမှ ဆောင်ရွက်စေပြီး၊ အစီရင်ခံစာကို သက်ဆိုင်ရာ ဝန်ကြီးဌာနသို့ တင်ပြရမည် ဖြစ်သည်။ “ပတ်ဝန်းကျင် ထိခိုက်မှု ဆန်းစစ်ခြင်းဆိုင်ရာ လုပ်ထုံးလုပ်နည်း အမိန့်ကြော်ငြာစာ အမှတ် ၆၁၆/၂၀၁၅” တွင် IEE လုပ်ရမည့် စီမံကိန်းအမျိုးအစားများနှင့် EIA လုပ်ရမည့် စီမံကိန်းအမျိုးအစားများကို ခွဲခြားသတ်မှတ်၍ ထုတ်ပြန် ကြေငြာထားပြီးဖြစ်သည်။

ကနဦးပတ်ဝန်းကျင် ထိခိုက်မှု ဆန်းစစ်ခြင်း အစီရင်ခံစာ ၏ ရည်ရွယ်ချက် (Purpose of IEE)

ကနဦးပတ်ဝန်းကျင်ထိခိုက်မှုဆန်းစစ်ခြင်းသည် အဆိုပြုစီမံကိန်းနှင့်ပတ်သက်၍ သဘာဝပတ်ဝန်းကျင်ဆိုင်ရာထိ ခိုက်မှုများကို ဆန်းစစ်လေ့လာရန်ရည်ရွယ်သည်။ စီမံကိန်းအကောင်အထည်ဖော်ဆောင်ရွက်ခြင်းကြောင့် ဖြစ် ပေါ်လာမည့် ဆိုးကျိုးတို့ကိုလျော့ချပြီး စီမံကိန်း၏ကောင်းကျိုးများပိုမို တိုးပွား စေရန်ရည်ရွယ်သည်။

ကနဦး ပတ်ဝန်းကျင်ထိခိုက်မှု ဆန်းစစ်ခြင်း လုပ်ငန်း၏ အဓိက ရည်ရွယ်ချက်များမှာ-

၁။ စီမံကိန်းအကောင်အထည်ဖော်ဆောင်ရွက်ထားသည့် နေရာတစ်ဝိုက်အတွင်း သဘာဝပတ်ဝန်းကျင်တွင်ပါဝင် သော ရုပ်ပိုင်းဆိုင်ရာ (Physical)၊ သက်ရှိဇီဝဆိုင်ရာ (Biological) တည်ရှိနေသော ပကတိအခြေအနေနှင့်လူမှု စီးပွားအခြေအနေနှင့်ပတ်သက်ပြီး လက်ရှိဖြစ်ပေါ်တည်ရှိနေသော အချက်အလက်များနှင့် မှတ်တမ်းများကိုရယူ နိုင်ရန်။

၂။ အဆိုပြု စီမံကိန်းကြောင့် ဖြစ်ပေါ်လာနိုင်သော သက်ရှိသဘာဝပတ်ဝန်းကျင်နှင့် လူမှုရေး၊ စီးပွားရေးဆိုင်ရာ အကျိုးသက်ရောက်မှုများ ဆန်းစစ်ရန်။

၃။ ဆိုးကျိုးသက်ရောက်မှုများကို လျော့နည်းစေရန် သင့်လျော်သည့် လုပ်ငန်းများ၊ ကောင်းကျိုး သက်ရောက်မှု များကို ပိုမိုဖြစ်ထွန်းတည်တံ့နိုင်စေမည့် နည်းလမ်းတို့ကို တင်ပြရန်။

မှတ်ချက်။ ။ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းအစီရင်ခံစာကို ပြည်သူများလေ့လာဖတ်ရှုပြီး အကြံပြု ချက်များပေးနိုင်ရန် ဟိုတယ်ဝက်(ဘ်)ဆိုဒ် <https://www.mercureyangonkabaaye.com/> တွင်ဖော်ပြထား ပါမည်။

ကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းလုပ်ငန်းအကျဉ်းချုပ်

MSR၏ ကျွမ်းကျင်ပညာရှင်အဖွဲ့အနေဖြင့် ရုပ်ပိုင်းဆိုင်ရာနှင့် သက်ရှိဆိုင်ရာအခြေခံအချက်အလက်များကို ကောက်ယူပြီး အဆိုပြုစီမံကိန်းကြောင့်ဖြစ်ပေါ်လာနိုင်သော ဆိုးကျိုး၊ ကောင်းကျိုးသက်ရောက်မှုများကို ခွဲခြား လေ့လာဆန်းစစ်သတ်မှတ်သည်။ စီမံကိန်းပတ်ဝန်းကျင်မှ အများပြည်သူများ၊ ဌာနဆိုင်ရာဝန်ထမ်းနှင့် လုပ်ငန်း တွင်းရှိ ဝန်ထမ်းအချို့နှင့် တွေ့ဆုံမေးမြန်းချက်ဖြင့် စီမံကိန်းအပေါ်အမြင်နှင့် သဘောထားများကို မေးမြန်းတင်ပြ ခြင်း ပြုလုပ်ခဲ့သည်။ သဘာဝပတ်ဝန်းကျင်အပေါ်သက်ရောက်သည့် ဆိုးကျိုးများနှင့် ဘေးအန္တရာယ် လျော့နည်း စေရန် သင့်လျော်သော အစီအစဉ်များကိုတင်ပြထားသည်။ ထို့နောက်စီမံကိန်းမှ ထွက်ပေါ်လာမည့် အကျိုးသက် ရောက်မှုများကို တိုးပွားစေပြီး၊ ဆိုးကျိုးသက်ရောက်မှုများကိုရှောင်ရှားနိုင်ရန်နှင့် လိုက်နာဆောင်ရွက်သင့်သည့် နည်းလမ်းများကို ဤအစီရင်ခံစာတွင် ရေးသားတင်ပြထားသည်။

ပတ်ဝန်းကျင်နှင့် လူမှုစီးပွားအခြေအနေ အခြေခံအချက်အလက်ကောက်ယူခြင်း

ဟိုတယ်တည်နေရာ ပတ်ဝန်းကျင်တဝိုက်၏ ထိတွေ့ဝန်းကျင်မှ လေ၊ မြေ၊ ရေ အနေအထားနှင့် သစ်ပင်ပန်းမန်၊ သတ္တဝါတို့နှင့်တကွ ဆူညံသံအပါအဝင် ရုပ်ပိုင်းဆိုင်ရာ သွင်ပြင်လက္ခဏာများအပြင် လူမှု၊ စီးပွား၊ ယဉ်ကျေးမှု ဓလေ့စရိုက်စသည်တို့၏ အခြေခံအချက်အလက်များကို ကောက်ယူဖော်ပြထားပါသည်။ MSR ၏ ကျွမ်းကျင် ပညာရှင်များအနေဖြင့် စီမံကိန်းတည်နေရာနှင့် ပတ်ဝန်းကျင်နေရာများကို သွားရောက်ခဲ့ပြီး အသေးစိတ် လေ့လာ မှုများကိုပြုလုပ်ကာ မှတ်တမ်းပြုစုခဲ့ပါသည်။ ဤလေ့လာမှုများမှ တွေ့ရှိချက်များကို အစီရင်ခံစာတွင် ပတ်ဝန်း ကျင်ဆိုင်ရာ အခြေခံအချက်အလက်များအဖြစ်ထည့်သွင်းဖော်ပြသွားပါမည်။

ရုပ်ပိုင်းဆိုင်ရာပတ်ဝန်းကျင်အခြေအနေအခြေခံအချက်အလက်ကောက်ယူခြင်း

လေအရည်အသွေး

ဟိုတယ်စီမံကိန်းအတွက် အမြင့်ဆုံးသက်ရောက်နိုင်သည့် လေအရည်အသွေး တိုင်းတာမှုကို၊ ကွင်းဆင်း လေ့လာ ရေးအဖွဲ့မှ ဇူလိုင်လ ၁၅၊ ၂၀၁၉ ခုနှစ်တွင် စီမံကိန်းဗဟိုချက်မမှ အချင်းဝက် ၃ ကီလိုမီတာ အဝန်းအဝိုင်းအတွင်းရှိ လူနေအိမ် တစ်နေရာတွင် တိုင်းတာရရှိခဲ့သည့် လေအရည်အသွေးရလဒ် မှတ်တမ်းကို ရည်ညွှန်းပါသည်။ တိုင်းတာမှုရလဒ်အရ ဟိုတယ်လုပ်ငန်းလည်ပတ်နေသည့် ကာလတွင်းလေထု၏အရည်အသွေးမှာ SO₂ အနည်း ငယ်များသည်မှလွဲ၍ ကျန်ပါဝင်သောဓာတ်ပစ္စည်းများသည် National Environmental Quality (Emission) Guideline 2015 မှသတ်မှတ်သည့် ကန့်သတ်ချက်အတွင်းတွင်ရှိသည်။ ထို့ကြောင့် စီမံကိန်းလုပ်ငန်း လည်ပတ်မှု သည် လေထုအရည်အသွေးကို ထိခိုက်မှုမရှိပါ။

PM_{2.5} အချင်း ၂.၅ မိုက်ခရိုမီတာ ၎င်းအောက် (သို့)ငယ်သော အမှုန်အမွှားများ

PM₁₀ အချင်း ၁၀ မိုက်ခရိုမီတာ ၎င်းအောက် (သို့)ငယ်သော အမှုန်အမွှားများ

ပါဝင်မှုများ	PM ₁₀ ($\mu\text{g}/\text{m}^3$) $\mu\text{g}/\text{m}^3$)	PM _{2.5} ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)	CO (ppb)	TVOC (ppb)
ရလဒ်	၁၇.၈	၉.၅	၁၁	၃၅.၈	၁၃.၅	၁၄၈.၇	၀.၄
NEQG စံနှုန်း	၅၀	၂၅	၂၀၀	၂၀	၁၀၀	၉၀၀၀	၄၄

အသံကျယ်လောင်မှု

အလားတူ ဆူညံမှုနှင့်ပတ်သက်၍ ဟိုတယ်အနီးတဝိုက် အသံကျယ်လောင်မှုကို အသံတိုင်းတာသည့် မီတာဖြင့် တိုင်းတာခဲ့ရာ နေ့ဘက်တွင် သတ်မှတ်စံညွှန်း dBA ၅၅ ထက်ပိုများပြီး၊ ညဘက်တွင် သတ်မှတ်စံညွှန်း dBA ၄၅ ထက်ပိုနေသည်ကိုတွေ့ရှိရပါသည်။ လမ်းမကြီးပေါ်တွင် အမြဲမပြတ်တည်ရှိနေသော ယာဉ်အသွားအလာများ ကြောင့်ယခုပမာဏတွင်တည်ရှိနေခြင်းဖြစ်ပြီး ပတ်ဝန်းကျင်ရှိ ဆောက်လုပ်ရေးလုပ်ငန်းများရှိနေ သောကြောင့် လည်း သတ်မှတ်စံချိန်၊ စံညွှန်း ပမာဏထက် ယာယီအားဖြင့် အနည်းငယ်မြင့်တက် နေခြင်းဖြစ်ပါသည်။

ရေအရည်အသွေး

ဟိုတယ်သည် ရန်ကုန်မြို့တော်စည်ပင်သာယာရေးကော်မတီ YCDC ၏ရေပေးဝေသည့်စနစ် (ပိုက်ဖြင့် သွယ်တန်း ရယူသောရေ) နှင့် အဝီစိတွင်းရေကို ရယူသုံးစွဲနေပါသည်။ ရေအရည်အသွေးစစ်ဆေးရန် ရေနမူနာများကို YCDC ပိုက်ဖြင့်သွယ်တန်းရယူသောရေနှင့် အဝီစိတွင်းရေ၊ ကန်ရေ တို့ကိုယူ၍ စစ်ဆေးခဲ့ပါသည်။ YCDCရေသည် သုံးစွဲရန်အန္တရာယ်မရှိပါ။ အဝီစိတွင်းရေမှာ သံဓါတ်များ နေသည်ကိုတွေ့ရသည်။ ဇီနတ်မာန်အောင်ဘုရားဝင်း အတွင်းရှိ ကန်ရေမှာ ရေတွင်ပျော်ဝင်သောအောက်စီဂျင်သည် ရှိသင့်သည့်အောက် အနည်းငယ်လျော့သည်မှလွဲ ၍ ပါဝင်သောဓါတ်ပစ္စည်းများမှာ ပုံမှန်ပင်ဖြစ်ပါသည်။

စွန့်ပစ်ရေ အရည်အသွေး

ရေဆိုးသန့်စင်သည့် စက်မှထွက်လာသော သန့်စင်ပြီး စွန့်ပစ်ရေကို စစ်ဆေးခဲ့ပါသည်။ အရေးကြီးသော ဓါတု နှင့် ဇီဝ အောက်စီဂျင်လိုအပ်မှု၊ coliform ပါဝင်မှုတို့သည် မကျော်လွန်အပ်သော စံကန့်သတ်ချက်များ အောက်မှာ ရှိသည်ကို တွေ့ရသည်။ ထို့ကြောင့် ရေဆိုးသန့်စင်စက်တပ်ဆင်ထားခြင်းနှင့် စွန့်ပစ်ရေဆိုးများကို စွန့်ထုတ်ခြင်း လုပ်ငန်းမှာ အပြည့်အဝ ထိရောက်မှုရှိသည်ဟုသုံးသပ်နိုင်ပါသည်။

မြေအမျိုးအစား

Mercure Yangon Kaba Aye ဟိုတယ်အဆောက်အုံကို လွန်ခဲ့သော နှစ်၂၀ ခန့်ကတည်းက တည်ဆောက်ပြီးစီး ခဲ့သည့်အတွက် လက်ရှိလုပ်ငန်းလည်ပတ်မှုကြောင့် ဤကနဦးပတ်ဝန်းကျင်ဆန်းစစ်ခြင်းလုပ်ငန်းတွင် Soil nutrients အမျိုးအစား အဆင့်သတ်မှတ်စစ်ဆေးခြင်း ဆောင်ရွက်နိုင်ခြင်းနှင့် သုံးသပ်အကဲဖြတ်ရန် မဖြစ်နိုင်ပါ။

ဇီဝဆိုင်ရာပတ်ဝန်းကျင်အခြေအနေအခြေခံ

အထက်ကတင်ပြခဲ့သည့်အတိုင်း Mercure Yangon Kaba Aye ဟိုတယ်သည် လုပ်ငန်း လည်ပတ်ဆဲ ဖြစ်သည့် MiCasa Group ထံမှဆက်ခံပြီး၊ ဆက်လက်၍လုပ်ငန်းလည်ပတ်လျက်ရှိသည့် ဟိုတယ်လုပ်ငန်းဖြစ်ခြင်း၊ ထို့ပြင် ဟိုတယ်၏ တည်နေရာသည် မြို့ပြလူနေရပ်ကွက်များ၊ စီးပွားရေးလုပ်ငန်းများ အချက်အချာကျသောအရပ် ဖြစ်သောကြောင့် ဇီဝပတ်ဝန်းကျင်ပြောင်းလဲနိုင်မှု ထပ်မံ ဖြစ်နိုင်ခြေမရှိနိုင်တော့သည်အတွက် စစ်တမ်းကောက် ယူမှုကို ထပ်မံမပြုလုပ်တော့ပါ။

လူမှု-စီးပွားဆိုင်ရာပတ်ဝန်းကျင်အခြေအနေ အခြေခံအချက်အလက်ကောက်ယူခြင်း

ရန်ကင်းမြို့နယ်၊ အမှတ် (၇) ရပ်ကွက်သည် ရန်ကင်းမြို့နယ်၏ အနောက်မြောက်အရပ်တွင် တည်ရှိပါသည်။ အမှတ် (၇) ရပ်ကွက်၏ အရှေ့ဘက်တွင် အမှတ် (၁၁) ရပ်ကွက်၊ အနောက်ဘက်တွင် ကမ္ဘာအေးဘုရားလမ်းနှင့် မရမ်းကုန်းမြို့နယ်၊ မြောက်ဘက်တွင် အမှတ် (၈) ရပ်ကွက်နှင့် တောင်ဘက်တွင် သစ္စာလမ်းမကြီးနှင့် အမှတ် (၆) ရပ်ကွက်တို့တည်ရှိပါသည်။ အမှတ် (၇) ရပ်ကွက်တွင် အိမ်ခြေ (၁၆၆) အိမ်ရှိပြီး အိမ်ထောင်စု (၄၅၆) စုရှိသည်။ လူဦးရေ စုစုပေါင်း (၂၅၈၈) ဦးနေထိုင်လျက်ရှိပါသည်။ နေထိုင်ကြသည့်လူမျိုးများမှာ ဗမာလူမျိုးအများစုဖြစ်ပြီး၊ ရခိုင်၊ ကချင် နှင့် ကုလားလူမျိုးစု အနည်းငယ်ရှိကြသည်။ ကိုးကွယ်သည့် ဘာသာမှာ ဗုဒ္ဓဘာသာကို အများစု ကိုးကွယ်ကြသည်။ ခရစ်ယာန်နှင့် အစ္စလာမ်ဘာသာ အနည်းငယ် ရှိကြသည်။

ရန်ကင်းမြို့နယ်၊ အမှတ် (၇) ရပ်ကွက်၏ လူဦးရေနှင့် လူမှုစီးပွားဆိုင်ရာ အချက်အလက်များ	
လူဦးရေ	၂၈၈ ဦး
အိမ်ထောင်စု စုစုပေါင်း	၄၅၆ စု
အိမ် စုစုပေါင်း	၁၆၆ အိမ်
လူမျိုး	ဗမာ၊ ရခိုင်၊ ကချင်၊ မွတ်ဆလင်
ပညာရေး	
ကျောင်း	အလယ်တန်းကျောင်း ၁ ကျောင်း
ကျန်းမာရေး	
ပြည်သူ့ဆေးရုံ	ကလေးဆေးရုံ ၁ရုံ
စီးပွားရေး	
ဈေးဆိုင်	၃ ဆိုင်
ဟိုတယ်	၂ ခု
ကားအရောင်းပြခန်း	၁ ခု
လူမှုရေးနှင့် အုပ်ချုပ်ရေး အချက်အလက်များ	
ရပ်ကွက် အုပ်ချုပ်ရေးမှူးရုံး	၁ ခု
ဘဏ်	၁ ခု
စာကြည့်တိုက်	၂ ခု
ဘုရားစေတီပေါင်း	၁ ခု
ဘုတ်တော်ကြီးကျောင်း	၁ ခု
ဓမ္မာရုံ	၂ ခု
အစိုးရ ရုံးဌာန	၅ ခု
မြို့နယ် ပညာရေးမှူးရုံး	၁ ခု
လုံခြုံရေး	
စစ်တပ်	၁ ခု
ရဲစခန်း	၁ ခု
ပို့ဆောင်ရေး	
ကိုယ်ပိုင်ယာဉ်	၇၅ စီး
ဆက်သွယ်ရေး	
ကြိုးဖုန်း	၅၅ လုံး
မိုဘိုင်းဖုန်း	၉၀၀ လုံး
တီဗွီ	၄၅၀ လုံး
စလောင်း	၅၀ ခု
မီးရရှိမှု	
လျှပ်စစ်မီးရရှိသူ အိမ်ထောင်စု	အိမ်တိုင်း
သန့်ရှင်းသောရေ ရရှိမှု	
ပိုက်လိုင်းမှ လာသောရေ (စည်ပင်သာယာမှု ပေးဝေသောရေပိုက်လိုင်းရေ)	အိမ်တိုင်း

ကနဦးပတ်ဝန်းကျင် ဆန်းစစ်ပြုလုပ်စဉ် ဆောင်ရွက်ခဲ့သည့် လုပ်ငန်းများ အကျဉ်းချုပ်

MSR၏ ပညာရှင်အဖွဲ့သည် စီမံကိန်းပတ်ဝန်းကျင်ရှိ ရုပ်ပိုင်းဆိုင်ရာနှင့် သက်ဆိုင်ရာ အခြေခံအချက်အလက်များကို ကောက်ယူပြီး အဆိုပြုစီမံကိန်းကြောင့် ဖြစ်ပေါ်လာနိုင်သော ဆိုးကျိုး၊ ကောင်းကျိုး သက်ရောက်မှုများကို ခွဲခြားလေ့လာဆန်းစစ် သတ်မှတ်သည်။ စီမံကိန်းပတ်ဝန်းကျင်မှ အများပြည်သူနှင့် ဌာနဆိုင်ရာဝန်ထမ်းတို့ကို တွေ့ဆုံမေးမြန်းလျက် စီမံကိန်းအပေါ်အမြင်နှင့် သဘောထားများကိုတင်ပြစေသည်။ သဘာဝပတ်ဝန်းကျင်အပေါ် သက်ရောက်သည့် ဆိုးကျိုးများနှင့် ဘေးအန္တရာယ်လျော့နည်းစေရန် ဆောင်ရွက်ရမည့် သင့်လျော်သော အစီအစဉ်များကိုတင်ပြသည်။ ထို့နောက် စီမံကိန်းမှထွက်ပေါ်လာမည့် ကောင်းကျိုး သက်ရောက်မှုများကို တိုးပွားစေပြီး ဆိုးကျိုးသက်ရောက်မှုများကို ရှောင်ရှားနိုင်ရန် လိုက်နာဆောင်ရွက်သင့်သည့် နည်းလမ်းများကို ဤအစီရင်ခံစာတွင် အကြံပြု ရေးသားတင်ပြထားသည်။

စီမံကိန်းနှင့် ပတ်သက်သည့် အခြား ရွေးချယ်စရာ နည်းလမ်း (Project Alternative)

ဤစီမံကိန်း နှင့် ပတ်သက်၍ “စီမံကိန်းကို ဆောင်ရွက်ခြင်း မပြု” ဟူသော အဆို ရွေးချယ်နည်းမှာ သက်ဆိုင်ခြင်း မရှိပါ။ အဘယ်ကြောင့်ဆိုသော် လက်ရှိအခြေအနေတွင် စီမံကိန်းသည် ဆောက်လုပ်ပြီးစီးပြီး ဖြစ်ပြီး၊ ဟိုတယ်လုပ်ငန်းများကိုလည်း လုပ်ကိုင်ဆောင်ရွက်လျက် ရှိပါသည်။

ပတ်ဝန်းကျင်နှင့် လူမှုရေးဆိုင်ရာ ဖြစ်နိုင်ဖွယ် အကျိုးသက်ရောက်မှုများ (Potential Environmental and Social Impacts)

ပတ်ဝန်းကျင်နှင့်လူမှုရေးဆိုင်ရာ အကျိုးသက်ရောက်မှုများကို ဆန်းစစ်ရာတွင် Check Lists, Networks , Map overlays နှင့် Key Informant interviews စသည့် နည်းလမ်းများကို အသုံးပြုပါသည်။ စီမံကိန်း၏ အကျိုးသက်ရောက်မှုကို လေ့လာဆန်းစစ်ရာတွင် Simple and descriptive checklist နည်းလမ်းကို အသုံးပြုပါသည်။ လုပ်ဆောင်မှု တစ်ခုချင်းအလိုက်ဖြစ်ပေါ် နိုင်သော အကျိုးသက်ရောက်မှုများကိုသုံးသပ်ပြီး၊ ကောင်းကျိုးဆိုးကျိုး သက်ရောက်မှုအဖြစ် ခွဲခြား သတ်မှတ်ပါသည်။

လုပ်ငန်းလည်ပတ်သည့် ကာလ ကောင်းကျိုး သက်ရောက်မှုများ

(က) အလုပ်အကိုင်အခွင့်အလမ်းများ ဖန်တီးခြင်း

(ခ) နိုင်ငံတော်နှင့် ဒေသအစိုးရ အတွက် ဝင်ငွေ ရရှိခြင်း

(ဂ) လုံခြုံမှု အနေအထားမြင့်လာခြင်း

(ဃ) ရပ်ကွက်ထဲတွင် စီးပွားရေးလုပ်ငန်းများ ပို၍ ကောင်းမွန်လာခြင်း

စီမံကိန်းလုပ်ငန်းလည်ပတ်စဉ်ကာလတွင် အထက်ပါကောင်းကျိုးသက်ရောက်မှုများရှိသကဲ့သို့ တစ်ဖက်မှာလည်း အားနည်းချက် အနည်းငယ်လည်း ရှိနိုင်ပါသည်။

လုပ်ငန်းလည်ပတ်သည့် ကာလ ဆိုးကျိုး သက်ရောက်မှုများ

(က) မြို့ပြ micro climate

(ခ) ရေသုံးစွဲမှု

(ဂ) စီးဆင်းရေ၊ မိုးရေ အရည်အသွေး

(ဃ) စွန့်ပစ်ရေ

(င) လျှပ်စစ်စွမ်းအင်သုံးစွဲမှု

(စ) စွန့်ပစ်ပစ္စည်း

(ဆ) ဘေးဖြစ်စေသော အဆိပ်အတောက်ဖြစ်စေသော ပစ္စည်းများ (စွန့်ပစ်ပစ္စည်းများ)

(ဇ) ယာဉ်သွားလာမှု

ပတ်ဝန်းကျင်ထိခိုက်မှု ဆိုးကျိုး လျှော့နည်းစေရေး လုပ်ငန်းများ (Mitigation Measures)

ဤစီမံကိန်းနှင့်ဆက်စပ်၍ဖြစ်ပေါ်လာသည့် ဆိုးကျိုးသက်ရောက်မှုများကိုလျှော့ချနိုင်မည့် အောက်ပါ ဆောင်ရွက်ချက်များ လိုက်နာဆောင်ရွက်ရန် ဖော်ပြထားသည်။

(က) မြို့ပြ microclimate (Urban micro climate)

မြို့ပြ microclimate ဖြစ်ခြင်းကို ကာကွယ်ရန် ဗဟို HVAC စနစ်စက်များကို လေဝင်၊ လေထွက် လည်ပတ်မှု ကောင်းစေရန်အတွက် လုံလောက်သည့်နေရာတွင် ထားရမည်။ လေအေးပေးစက်၏ အခန်းပြင်ပတွင်ထားသည့် စက်ကိုလည်း လေအဝင်အထွက်ကောင်းသည့်၊ ရသည့်၊ နေရာများတွင်ထားရမည်။ အပူပို၊ အပူစီးကူး လွယ်သော မျက်နှာပြင်များတွင် အပူချိန်အထုတ်နည်းသောပစ္စည်းများ၊ အသုံးအဆောင်များထားရှိခြင်း၊ အစားထိုး တပ်ဆင်ခြင်းများပြုရမည်။ အုတ်၊ အင်္ဂါတေ နှင့် ရေမစုပ်နိုင်သော မျက်နှာပြင်များ၊ အမိုးကဲ့သို့သော နေရာမှာ ရောင်ပြန်ဆေးသုပ်ခြင်း၊ နေကာများ တပ်ဆင်ခြင်း၊ အမိုးနှင့် နံရံများတွင် အပူကာ/ထိန်းအပင်များ စိုက်ခြင်းဖြင့် အပူကို လျှော့ချရမည်။ ဟိုတယ်ဝင်းအတွင်း အလှစိုက်အပင်များ စိုက်နိုင်သမျှ စိုက်ထားပေးရမည်။

(ခ) ရေသုံးစွဲခြင်း

မလိုအပ်ဘဲ ရေသုံးစွဲမှုကိုထိန်းချုပ်ရန် ရေသုံးစွဲမှုအမျိုးအစားအလိုက် ရေသုံးစွဲမှုကိုတိုင်းတာရန် လိုအပ်ပါသည်။ ဟိုတယ်၏ လုပ်ဆောင်မှုများ ဝန်ဆောင်မှုများမှာ ရေသုံးစွဲခြင်းကို မှတ်တမ်းတင်ပြရပါမည်။ ရေယိုခြင်း၊ ပိုက်လိုင်းပေါက်ခြင်းများကို သတိပေးသည့် အချက်ပြစနစ်များတပ်ဆင်ရပါမည်။ လိုအပ်လျှင် ရေပေးဝေမှုစနစ် တလျှောက်ရှိ တပ်ဆင်ထားသည့်ပစ္စည်းများကိုပုံမှန်စစ်ဆေးသည့်အစီအစဉ်ကို ရေဆွဲထားသည့်အတိုင်းတိကျစွာ အကောင်အထည်ဖော်ရပါမည်။

(ဂ) မိုးရေ အရည်အသွေး

ဟိုတယ်ဝင်းမှ စီးဆင်းမိုးရေသည် အများပြည်သူသုံး မြောင်းထဲသို့ မစီးဝင်မီ ဟိုတယ်၏ ရေထွက် ပေါက်များမှ ရေစစ်ဧကဖြင့် အဆင့်ဆင့် ကာထားသင့်ပါသည်။ အုတ်ခင်းထာသည့် ကားရပ်နေရာများအောက်တွင် မိုးရေနှင့် ပါလာသော အနယ်များ အမှိုက်အဆွေးအမြေများကို အနည်ထိုင်စေကာ စစ်ထုတ်ပြီးမှ အများသုံး မြောင်းများထဲ သို့စီးဝင်စေရန် Underground containment chamber (detention system) ထားရှိရန် တိုက်တွန်းပါသည်။

(ဃ) စွန့်ပစ်ရေ

စွန့်ပစ်ရေသန့်စင်စက်ကို မိလ္လာစွန့်ပစ်ရေနှင့် လျှော်ဖွတ်ဆေးကြောရေ (domestic wastewater) တို့အတွက် သီးသန့် သန့်စင်စက်စနစ်ကို ခွဲခြားထားသင့်သည်။ စွန့်ပစ်ရေကို နေ့စဉ် စစ်ဆေးပေးခြင်းဖြင့် ရေဆိုးသန့်စင်စက် နှင့် ယင်း၏အထောက်အပံ့ပစ္စည်းများ၏ လုပ်ဆောင်ချက်များနှင့် လုပ်ဆောင်နိုင်မှု စွမ်းရည်များကို ဆန်းစစ်သိရှိ နိုင်သည်။ အိမ်သာများမှ စွန့်ပစ်ရေ လွန်ကဲစွာစီးဝင်ပြီး၊ စက်အလုပ်မလုပ်ခြင်းကိုကာကွယ်ရမည်။ ရေဆိုးသန့်စင် လုပ်ငန်းစဉ် ပျက်ခဲ့သည်ရှိသော် အရေးပေါ် အစားထိုးနည်းလမ်းများ ပြင်ဆင်ထားရမည်။ လက်ရှိ ရေဆိုးသန့်စင် စက်မှ အနံ့မထွက်အောင် ကြီးကြပ်ခြင်း၊ သန့်စင်စက်ပျက်လျှင် အရေးပေါ်အချိန်မီအစားထိုးနိုင်ရန် ပစ္စည်း ကိရိယာများ (မော်တာ၊ ရေစုပ်စက်) အသင့်ထားရှိရမည်။

(င) လျှပ်စစ်စွမ်းအင်သုံးစွဲမှု

ဟိုတယ်အထပ်တိုင်းမှာ လျှပ်စစ်သုံးစွဲမှုနှင့် ဟိုတယ်ဝန်ဆောင်မှုလုပ်ငန်းများမှာ လျှပ်စစ်သုံးစွဲမှုတိုင်းကို စစ်ဆေး တိုင်းတာသည့် စနစ်များထားရှိခြင်းဖြင့် လျှပ်စစ်စွမ်းအင် သုံးစွဲမှုကို ထိန်းချုပ်နိုင်သည်။ လျှပ်စစ်ပစ္စည်း ကိရိယာ အဟောင်းများလဲသည့်အခါ စွမ်းရည်ပိုမိုကောင်းမွန်ပြီး လျှပ်စစ်စွမ်းအင်သုံးအား သက်သာသည့် ပစ္စည်းများကို ရွေးချယ်ရပါမည်။ အခါအားလျော်စွာ လျှပ်စစ်စွမ်းအင်သုံးစွဲမှုကို စစ်ဆေးခြင်း၊ စွမ်းအင်ချွေတာရန် လူသွား စင်္ကြံတွင် လူလာမှ မီးလင်းသော အာရုံခံစနစ်များ တပ်ဆင်ခြင်း၊ ညအလှူမီးများကို သတ်မှတ်ချိန်အတိုင်း ထွန်း ရန် အချိန်ကိုက်စက်များ တပ်ဆင်ရန် တိုက်တွန်းပါသည်။

(စ) စွန့်ပစ်အမှိုက်

အမှိုက်စွန့်ထုတ်ခြင်းနှင့် စပ်လျဉ်း၍ စွန့်ထုတ်သည့်ပမာဏကို တတ်နိုင်သလောက်လျှော့ချရန် 3R ပေါ်လစီကို ဟိုတယ်က ကျင့်သုံးသည့် Planet 21 မူဝါဒအတိုင်း တိတိကျကျ လိုက်နာနိုင်ရန် စစ်ဆေးအကဲဖြတ်မှု အစီအမံ များကို ပြဌာန်းသည့်အတိုင်း ကျင့်သုံးနိုင်ရန်တိုက်တွန်းသည်။ အမှိုက်အစုံများ သို့မဟုတ် စားကြွင်းစားကျန် (မီးဖိုမှစွန့်သောအမှိုက်)များကို ကြွက်၊ ခြင်၊ ယင်ပိုးကောင်များမလာအောင်၊ ရွံစရာမဖြစ်အောင် လေလုံအောင် ပိတ်ထားရမည်။ စွန့်ပစ်မည့်အမှိုက်များကို စနစ်တကျစုထားပြီး အမှိုက်သိမ်းချိန်တို့ကို ပုံမှန် သတ်မှတ်ထားသည် စီစဉ်ချက်အတိုင်း အစဉ်တစိုက်ဆောင်ရွက်ရန် အရေးကြီးပါသည်။ စွန့်ပစ်ပစ္စည်းများ စီမံခန့်ခွဲသည့် အဖွဲ့ကို ဟိုတယ်တွင် ဖွဲ့စည်းခန့်ထားပြီး မြို့တော်စည်ပင်သာယာရေးကော်မတီ နှင့် ပုဂ္ဂလိက သန့်ရှင်းရေးကုမ္ပဏီ စသည့် အဖွဲ့အစည်းများနှင့် သဘောတူ ညှိနှိုင်းဆောင်ရွက်ထားသင့်သည်။

(ဆ) အန္တရာယ်ရှိသော အဆိပ်အတောက်ပစ္စည်း/ စွန့်ပစ်ပစ္စည်း

ခါတုပေဒပစ္စည်းများကိုမူ ဟိုတယ်မှ ထိန်းသိမ်းစီမံကွပ်ကဲနိုင်လောက်သော ပမာဏကိုသာ သိုလှောင်ထားရန် အရေးကြီးပါသည်။ ထိုပစ္စည်းများကို စွန့်ပစ်ခြင်းနှင့် သယ်ယူခြင်းကို လူတစ်ဦးထက်မနည်း အနီးကပ် အပြန်အလှန် သတိပေး၍ ကြီးကြပ်ကိုင်တွယ်ရန် တိုက်တွန်းသည်။ စတုရန်းများသည် ခါတုပေဒပစ္စည်းများနှင့် ကိုင်တွယ် အသုံးချ အလုပ်လုပ်ရန် လုံလောက်သော အကျယ်အဝန်းရှိရပါမည်။ ဓာတုပစ္စည်းများကိုလည်း လုံခြုံစွာထားရှိ နိုင်ရန် သိုလှောင်ကန်များဖြင့် အဆိပ်အတောက် အန္တရာယ်ကင်းအောင် ထိန်းသိမ်းကွပ်ကဲရန် အဆင်သတိပြု ရမည်။ အသုံးပြုသည့် အဆင့်တိုင်းတွင် တိကျသောနည်းစနစ်များအတိုင်း လုပ်ဆောင်ရမည်။ အရေးပေါ်အခြေ အနေများအတွက် တခြားအဝင်အထွက်လမ်းရှိနေအောင် ဖန်တီးပေးထားရမည်။ ခါတုပေဒပစ္စည်း သိုလှောင်ရုံ အတွင်းသို့ သတ်မှတ်ထားသော တာဝန်ခံတစ်ဦးမှအပ ဝင်ထွက်ခွင့် ကန့်သတ်ထားရမည်။

(ဇ) ယာဉ်သွားလာမှု

ကားရှုပ်သောနာရီပိုင်းများတွင် ဟိုတယ်၏ထွက်ပေါက်မှာလုံခြုံရေးဝန်ထမ်းတစ်ဦးကိုတာဝန်ချထားပြီး ဟိုတယ် မှအထွက်ကားများကို လမ်းမပေါ်သို့ ဘေးကင်းစွာရောက်ရှိနိုင်ရန် ကူညီလမ်းညွှန်ပြပေးရမည်။ ဟိုတယ် အဝင် အထွက် ကားများကြောင့် လမ်းမပေါ်မှ ယာဉ်အသွားအလာ အနှောင့်အယှက်မဖြစ်အောင် ကြည့်ပေးရမည်။ အထွက်ကားများအတွက် တစ်ဖက်မှ လာနေသောကားများကိုမြင်ရအောင် ဟိုတယ်၏ ထွက်ပေါက် ဝင်းထဲတွင် မှန်ဘီလူးခုံးမှန် တပ်ဆင်ထားရမည်။

အများပြည်သူနှင့် ညှိနှိုင်း တိုင်ပင်ဆွေးနွေးခြင်း

MSR သည် ဧပြီ ပထမ အပတ်တွင် ရပ်ကွက်အုပ်ချုပ်ရေးမှူး၊ (၇) ရပ်ကွက်၊ ရန်ကင်းမြို့နယ် မြို့နယ် အထွေထွေ အုပ်ချုပ်ရေးမှူး၊ ဌာန သက်ဆိုင်ရာ အစိုးရအရာရှိများ၊ မြို့နယ်အရံမီးသတ်တပ်မှူး၊ ပုဂ္ဂလိက လုပ်ငန်းရှင်များ၊ ရပ်ကွက်တွင်နေထိုင်သူများကိုဖိတ်ကြား၍ အများပြည်သူနှင့် တွေ့ဆုံဆွေးနွေးညှိနှိုင်း အစည်းအဝေးကျင်းပရန် စီစဉ်ထားပြီး ဖြစ်သည်။ သို့သော် coronavirus (COVID-19) pandemic ကပ်ရောဂါကြောင့် လူအများ ကျန်းမာရေး၊ လုံခြုံရေးအတွက် အများပြည်သူနှင့် တွေ့ဆုံဆွေးနွေးညှိနှိုင်း အစည်းအဝေးကို ရွှေ့ဆိုင်းထားလိုက်ပါ သည်။

ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် စောင့်ကြပ်ကြည့်ရှုခြင်း၊ စည်ကမ်းများကို လိုက်နာဆောင်ရွက် ရန် ကတိကဝတ်ထားခြင်း

SCCP Prince Co. Ltd သည် ပတ်ဝန်းကျင်နှင့် လူမှုစီးပွား စီမံခန့်ခွဲမှုနှင့် စောင့်ကြပ်ကြည့်ရှုခြင်း အစီအစဉ် တို့ကို လိုက်နာ ဆောင်ရွက်ရန် ကတိပြုကြသည်။ Mercure Yangon Kaba Aye ဟိုတယ်သည် လုပ်ငန်းလည်ပတ်ရာ တွင် ECD မှ ချမှတ်ထားသော လမ်းညွှန်ချက်များအတိုင်း ဆောင်ရွက်မည်။ ဟိုတယ်လုပ်ငန်း လည်ပတ်ခြင်း အဆင့်တွင် ဆောင်ရွက်ရန် ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်နှင့် စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ်ကို ရေးဆွဲထား ပါသည်။ ထိုပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုအစီအစဉ်တွင် အလားအလာရှိသော ပတ်ဝန်းကျင် (ရှုပ်ပိုင်း၊ ဇီဝပိုင်း နှင့်

လူမှုရေး) အပေါ်သက်ရောက်မှုများ၊ သင့်လျော်သော လျော့နည်းစေသည့် နည်းလမ်းများ၊ အကောင်အထည်ဖော် ဆောင်ရွက်မည့် အဖွဲ့အစည်းနှင့် တာဝန်ရှိအဖွဲ့အစည်းတို့ပါဝင်သည်။ ထို့ပြင် ရေးဆွဲထားသည့် စောင့်ကြပ်ကြည့်ရှုမှု အစီအစဉ်ကို ဖော်ပြထားပါသည်။ လုပ်ငန်းလည်ပတ်ဆောင်ရွက်သည့် တစ်လျှောက်လုံး ပတ်ဝန်းကျင်စီမံခန့်ခွဲမှုနှင့် ဆိုးကျိုးလျော့ချရေးလုပ်ငန်းများ၏ ထိရောက်မှုကို စောင့်ကြပ်ကြည့်ရှုသွားမည်။ စောင့်ကြပ်ကြည့်ရှုခြင်းကို ကုမ္ပဏီ၏ စီမံခန့်ခွဲရေးဌာနမှ ဆောင်ရွက်မည်။ SCCP Prince Co. Ltd မှ ခန့်အပ်ထားသော စီမံခန့်ခွဲရေးဌာနသည် ပတ်ဝန်းကျင်နှင့် လူမှုစီးပွား စီမံခန့်ခွဲမှုအစီအစဉ်နှင့်စပ်လျဉ်းသော လှုပ်ရှားမှုအားလုံးကို ဦးစီးညွှန်ကြားရမည်ဖြစ်ပါသည်။ ဆိုးကျိုးလျော့နည်းစေရေး လုပ်ငန်းများ အကောင်အထည်ဖော်ရာတွင် ဦးစီးညွှန်ကြားပြီး ရလဒ်များကို လည်း စောင့်ကြပ်ကြည့်ရှုရပါမည်။

နိဂုံးနှင့် အကြံပြုချက်

SCCP Prince Co. Ltd မှ အဆိုပြုထားသော စီမံကိန်းသည် တိုင်းပြည်၏ လူမှုစီးပွားဘဝ ဖွံ့ဖြိုးတိုးတက်မှုအတွက် အပြုသဘောသက်ရောက်မှုရှိသည်ဟု နိဂုံးချုပ်ရမည်ဖြစ်ပါသည်။ စီမံကိန်းဧရိယာဝန်းကျင်ရှိ လူများမှာ Mercure Yangon Kaba Aye Hotel ကို ကန့်ကွက်ခြင်း မရှိပါ။ စင်စစ် ဤဟိုတယ်ကြောင့် ဒေသခံပြည်သူတို့၏ စီးပွားရေး၊ လုံခြုံရေးတို့ကို ပိုမိုကောင်းမွန်စေပါသည်။ အပြုသဘောဆောင်သော လူမှုစီးပွားနှင့် ပတ်ဝန်းကျင်ဆိုင်ရာ အကျိုးကျေးဇူးများကို ဟိုတယ်တည်ရှိနေမှု၏ ရလဒ်ဟုစဉ်းစားလျက် ဤစီမံကိန်းကြောင့် ရုပ်ဝတ္ထု၊ သတ္တဝါနှင့် လူမှုပတ်ဝန်းကျင်တို့ အပေါ် ပြောပလောက်သော ဆိုးကျိုး သက်ရောက်မှု မရှိဟု ဆုံးဖြတ်သည်။

လျှောက်ထားသူသည် ဆိုးကျိုးလျော့ချရေးနှင့် ပပျောက်ရေး နည်းလမ်းများအတိုင်း ဆောင်ရွက်၍ ဆက်လက်ပြီး ပတ်ဝန်းကျင်စီမံခန့်ခွဲရေးနှင့် စောင့်ကြပ်ကြည့်ရှုရေးအစီအစဉ်များအတိုင်း အကောင်အထည်ဖော်သွားမည်ဟူသော နားလည်မှုနှင့်အတူ ဟိုတယ် စီမံကိန်းကို ဆက်လက် လုပ်ဆောင်သွားပါမည်။



EXECUTIVE SUMMARY (ENGLISH)

Introduction

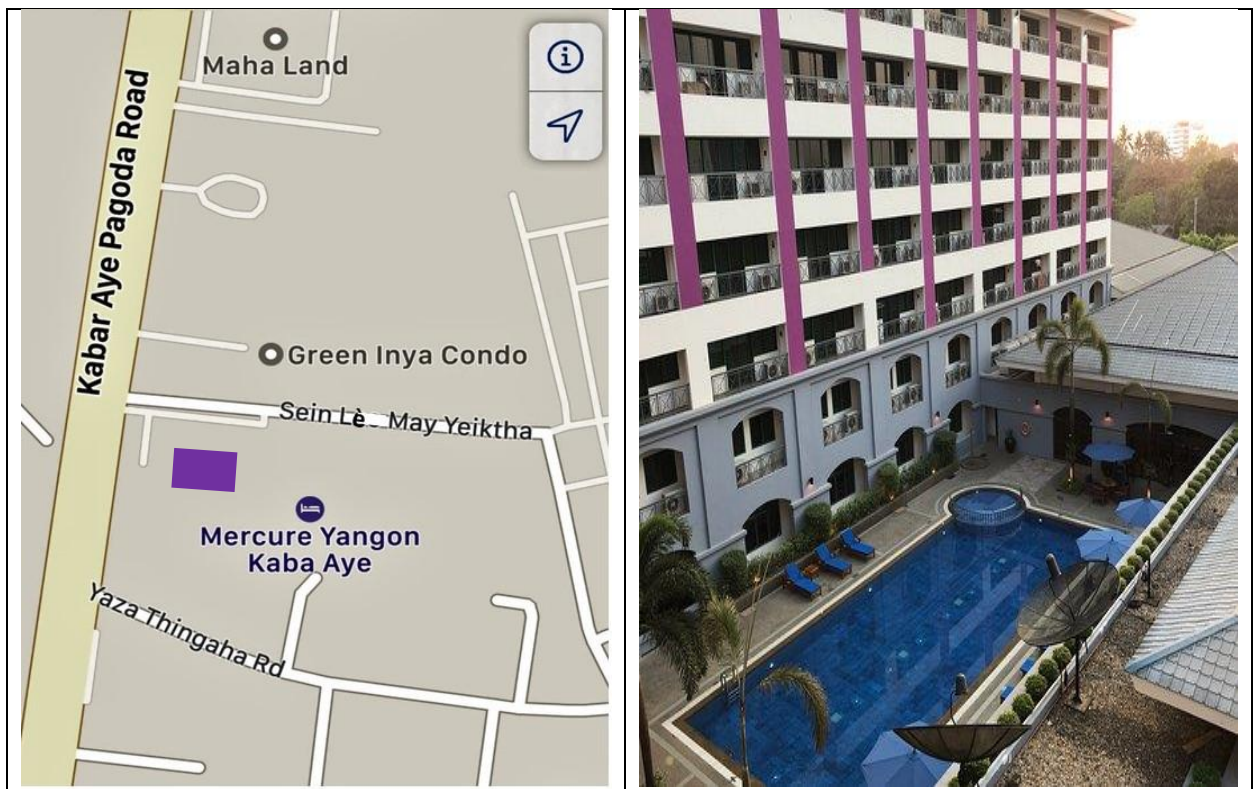
SCCP Prince Co., Ltd. based in Singapore has been proposed to develop and to continue operating the Mercure Yangon Kaba Aye Hotel and Service Apartment project which was previously operating as the MiCasa Hotel Apartments by MiCasa Hotel Ltd.

SCCP Prince Co., Ltd submitted the application to Myanmar Investment Commission on 16 December 2019 for approval and review of changing the name of economic organization and to continue operation of the hotel and service apartment business. As stated terms and conditions by Myanmar Investment Commission, SCCP Prince Co., Ltd shall perform Initial Environmental Examination (IEE) and Environmental Management Plan (EMP) to ensure the preservation of environment and surrounding area.

Regarding this project, the Department of Environmental Conservation has offered comments to carry out IEE process as per the guidelines and procedures laid down by the Environmental Conservation Department (ECD). To fulfil the comments and suggestions by ECD, SCCP Prince Co., Ltd has assigned Myanmar Survey Research Company to conduct Initial Environmental Examination to identify potential impacts of the project.

This Initial Environmental Examination (IEE) report presents the findings of potential impacts on environment due to development and operation of the Mercure Yangon Kaba Aye Hotel and Service Apartment project. The examination report is prepared by the expert team from Myanmar Survey Research as per IEE procedure laid down by the Environmental Conservation Department, the Ministry of Environmental Conservation and Forestry.

Project Description and Location



Mercure Yangon Kaba Aye Hotel and Service Apartment project is located at No.17, Kabar Aye Pagoda Road which is at the corner of Sein Lè May Avenue in Yankin Township of Yangon Region. The building comprises of a total constructed floor area (CFA) of 17,988 squares meters. The hotel is a 7-storey RC type building that consists of 184 guest rooms, suites, restaurant and swimming pool. The business activities of the project also include MiCasa Restaurant & Bar, outdoor pool with children's pool and fitness centre.

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Project summary

Project name: Mercure Yangon Kaba Aye Hotel and Service Apartment	
Year of Project Development	7-8-2015
Owner	SCCP Prince Co., Ltd
	ADD: No. 17, Kabar Aye Pagoda Road, Yankin Township, Yangon Phone number: +951 8650933
Project Location:	No. 17, Kabar Aye Pagoda Road, Yankin Township, Yangon
Project's Area	1.944 acres
Building area	17,988 sq m
Type of Building	RC 7-storey Building
Structure	Reinforced Concrete
Facilities and services	Free WiFi, HD-TV, laundry, dry cleaning services, luggage storage, Ballroom, Meeting room, Restaurant and Bar, 2 Swimming pools, Spa, Fitness centre
Lift and Staircase efficiency	Passenger lift 1 & 2 – load capacity 750 (Ground to 6 th Floor) Fire/ service lift 1 – load capacity 1350 kg (Ground to 6 th Floor) Staircase 1, 2, & 3 (Ground to 6 th Floor)
Total No. of room	184 rooms
Total No. of parking slot	50 slots

Policy, Legal and Institutional Framework

The Environmental Conservation Law (2012), or the Pyidaungsu Hluttaw Law No.9/2012, and its executive regulations set the overall framework for environmental protection in Myanmar. According to this legal framework, an Initial Environmental Examination (IEE) report which

includes social and environmental impact assessment need to be prepared by an independent third party and submitted together with the application by the project developer for a project license.

The EIA procedure has been formally issued as Ministry's notification No.616/9/2015 since 29th December 2015. This notification spells the requirement of IEE for such a kind of project and detailed procedure of conducting the study process. Nowadays environmental guidelines for tourist resort development and operation are available in internet literatures and Ministry of Hotel and Tourism has already issued a regulation to follow the principles designated in it particularly for construction of hotels and other types of infrastructures related to tourism industry.

Purpose of the IEE Report

This study aims at assessing the environmental aspects and impacts of the proposed project, analysing the measures to minimize any potential negative impacts and enhancing the potential positive impacts that will be resulted from the implementation of the project and operating the project activities. With that objectives, the initial work of study involves conducting baseline data collection both for existing biophysical environment and socioeconomic conditions of the project-affected areas, since the description of the existing background or affected environment is an integral part of an environmental impact study.

The objectives of this IEE study are:

- to obtain baseline information and examine the existing environmental situation on and around the project site and socio-economic situation of the community specifically, people on or near the project site;
- to assess potential impacts (positive and negative) of the project that will affect the people living in the buildings of the project and the area in and around the project site; and
- to recommend mitigation measures to minimize the negative impacts and to enhance the positive impacts.

Note: The IEE report for the project, including the proceedings of public consultation, will be made public by posting on the hotel's website <https://www.mercureyangonkabaaye.com/>

Summary of the Activities undertaken during the IEE

Since Mercure Yangon Kaba Aye Hotel and Service Apartment project has been constructed and already in operation, the impacts and mitigation measures for the construction phase cannot be revealed as stated in the instructions made by Ministry of Natural Resources and Environmental Conservation which was mentioned in the MIC letter. Hence, MSR's expert team conducted the biophysical and socio-economic examination of the project site and its surrounding area as baseline data collection and analysed. Meetings and discussions with people who are living in surrounding area about the project were also conducted, so as to get public opinion and idea upon relevancy of selected alternative. Mitigation measures were identified and analysed after impact significance was assessed. Then the team provides the recommendations in the IEE final report.

Baseline Environmental and Socioeconomic conditions

The scope covers the project's area influence, the immediate neighbourhood around the hotel, across the subjects of:

Physical Environment,

Biological Environment, and

Socio-cultural and Economic Environment.

The experts from Myanmar Survey Research visited the site and observable locations of the project. Professional judgment through field observation and findings of the field trip are presented as base line data in this Initial Environmental Examination report.

Physical Environmental Observation

Air Quality

IEE field survey team made reference to the ambient air quality results which was measured on July 15, 2019 at one of the resident's home within 3km radius of project area. The ambient air quality results show that the values of air parameters were under National Environmental Quality Guideline 2015 except for SO₂ which was slightly higher than normal.

Parameters	PM ₁₀ μg/m ³	PM _{2.5} μg/m ³	NO _x μg/m ³	SO ₂ μg/m ³	O ₃ μg/m ³	CO ppb	TVOC ppb
Result	17.8	9.5	11	35.8	22	148.7	0.4
NEQG Guideline	50	25	200	20	100	9000	44

Thus, the project does not have the impact on the air quality under operation stage.

Sound Level

While measuring the surrounding sound level the results shows higher level of dBA in both day (>55) and night (>45) which is mainly due to heavy traffic and construction works surrounding Mercure Hotel. **Water Quality**

The project is using the YCDC's pipe water and tube well for water supply. For water quality test analysis water samples were collected from YCDC pipe water, tube well water, and surface water. The results indicated that the YCDC water is harmless for domestic application. Tube well water contained high level of iron content. As for surface water which was taken sample from Zina Man Aung compound, mineralogical characteristics of pond water (i.e. alkalinity and hardness) were recorded as normal for surface water quality only with slightly below average margin of dissolved oxygen level (7.0 mg/l).

Effluent Wastewater Quality

The effluent water from the wastewater treatment plan was tested. The results indicate that most important parameters for wastewater effluent (i.e. chemical and biological oxygen demand, total coliform) are under enforced limit. Therefore, it could be evaluated that the wastewater treatment plant installed for handling the sanitary and domestic sewer is fully operational and efficient.

Soil quality

Soil quality test for soil nutrients and soil type analysis is irrelevant in IEE of Mercure Yangon Kaba Aye Hotel and Apartment because the construction was completed and is operating more than 20 years.

Biological Environment

Likewise, since the Mercure Yangon Kaba Aye Hotel and Service Apartment is currently on operation and maintenance stage after succeeding the hotel and its related operation from MiCasa Hotel Apartment, the examination on the biological environment is not pertinent. In

addition, the location of the hotel is at the mid of the urban residential and business district, changes of biological resources (flora, fauna) are not required to examine.

Social-economic Environment

Mercure Yangon Kaba Aye Hotel and Service Apartment is located in No. 7 Ward, north-west of Yankin Township. No. 11 Ward is to the east of it. Kabar Aye Pagoda Road and Mayangone Township are to the west. No. 8 Ward is to the north. Thitsar Road and No. 6 Ward are to the south. There are 166 households and 456 families in this ward. It has a total population of 2288. Most of the people living there are Myanmar and a few Rakhine, Kachin and Indian. Most of the people believe in Buddhism. A few people are Christians and Islamists.

Table: Demographic data on No 7 ward of Yankin Township

Population	2,288 People
No. of households	456
No. of houses	166
Ethnic groups	Bamar, Rakhine, Kachin, Muslims
Education	
No. of schools	1 middle school
Health care	
Public hospitals	1 Children Hospital
Business	
No. of shops	3
No. of hotels	2
No. of car showroom	1
Social and administrative data	
No. of ward administrator's office	1
No. of banks	1
No. of libraries	2
No. of pagodas	1
No. of monasteries	1
No. of religious buildings	2
No. of government departments	5
No. of township education office	1
Security	
No. of military units	1
No. of police stations	1
Transportation	
No. of private cars	75
Communication	
No. of cable phones	55
No. of mobile phones	900
No. of TVs	450
No. of houses with satellite connection	50
Access to electricity	
No. of households with electric light	All households
Access to clean water	
No. of households with water pipelines (access to town water supply system)	All households

Project Alternative

No project option is not implied for this project because the development of Mercure Yangon Kaba Aye Hotel and Service Apartment has been already completed.

Environmental and Social Impacts assessment findings

To identify the potential impacts on social and physical environments, various methods such as checklists, networks, map, overlays, and key informant interviews are applied. Comprehensive literature reviews and published information helps for impact identification as well. For this project, simple and descriptive checklists are used for impact identification. Each action and its potential for generating an impact on each environmental item are considered and positive and negative impacts are also identified.

Potential Positive Impacts

- Creation of employment opportunity
- Revenue to national and local governments
- Improved security
- Improve business in neighbourhood

Against the background of the above positive impacts, there are a few negative drawbacks that are anticipated in operation phase of the project.

Potential Negative Impacts

- Urban Microclimate
- Water Consumption
- Quality of storm water
- Waste water
- Energy consumption
- Hazardous and Toxic Substances / wastes
- Traffic Flow

Environmental Mitigation Measure

In order to alleviate or minimize the identified negative impacts associated with the project, the following measures should be undertaken.

Urban Microclimate

To prevent urban microclimate, there must have enough space for HVAC system for air circulation. Air condition units must locate at the most prevailing wind rose area. On the surfaces with heat conduction and radiation, adopt heat elimination fittings, materials, decorations and retrofits. Paved and impermeable surfaces such as roofs must be applied reflected roof coating, shading, install green roofs and walls. Exhaust flue should be keep away from the public places. Provide with as much ornamental plants and green parking lots as possible.

Water consumption

To avoid unnecessary usage metering water consumption according to type of consumption or uses is required. Water consumption according to hotel activities and services have to report.

Install alert system for prolong leakage, pipeline burst and per daily consumption in each apartment/room. Setup water efficient water supply appurtenances in case of replacement needed. Introduce water reuse plan for gardening, washout and flushing sewer.

Quality of storm water

Concerning the quality of storm water, screen and mesh with smaller openings should be established before storm water are directly discharged into public sewer. At the paved surface

area, small and temporary underground containment chamber (retention) is highly encouraged to set up to filter silt and detritus carried along surface runoff before final discharged into public drain.

Waste water

Wastewater treatment Plant (Effluent) should be set up in separate system for treating domestic wastewater and septic waste. Waste water from domestic sewer and guest rooms should be inspected daily to estimate the performance and efficiency of wastewater treatment plant and its supporting facilities. Other measures are to prevent influent overloading and system failure, prepare emergency and backup model in case of treatment process failure, ensure odor nuisance of existing wastewater treatment plant, and to provide with backup sources (motors and pump) for timely replacement on system failure.

Energy consumption

Energy consumption can be controlled by metering the electricity consumption by floor levels, hotel functions, and service types. Opt efficient and energy saving appliance when old appliances need replacement. Conducting periodical energy audit, installing light and occupant sensors along corridors for energy saving, and installing timer for scheduling power for night light and decoration devices are suggested.

Solid wastes

Waste production have to be minimized by introducing 3R policy. Wastes should be separated in categories for instant salvaging. Wet solid wastes or food wastes are discarded in airtight enclosure and properly neutralized lest occurring nuisance. Collection and final disposal are scheduled and well-functioning. Contracting multiple waste collection services for efficient waste management.



Hazardous and Toxic Substances / wastes

Chemical substances should be stored not more than acceptable volume or level. Discard and shipment should be supervised by more than one person. Store rooms must have enough space to ensure for working and application ergonomic. Goods must be confined to the storage tanks according to degree of safety, risk and toxicity. Strict Storekeeping practices are applied for each

stage of uses. Alternative access road should be available for emergency state. Set up and grant fixed authorized person for admission into storage facilities.

Traffic Flow

Assign a Security Officer from the hotel at the exit gate of Hotel during peak hours to guide the driver while leaving hotel from driveway to enter the main road safely. Oversee not to cause traffic flow disturbance due to vehicles entering and leaving at hotel gates. The convex mirror should be installed at the exit gate that provides the best view of the road and the oncoming vehicles concerned.

Public consultation and participation

Public consultation meeting was originally scheduled for first week of April 2020 with representatives from the Ward Administrator, 7th Ward, Yankin Township, governmental officials concerned from the Township General Affairs Administration Department, township auxiliary fire brigade commander, assistant ward administrators, private entrepreneurs and residents of 7th Ward. Protecting the health, safety and well-being of attendees MSR has made the necessary decision to postpone the public consultation meeting in the light of the coronavirus (COVID-19) pandemic.

Commitment to Environment Management and Monitoring

SCCP Prince Co., Ltd is committed to implementation of an environmental and social management and monitoring plan which will ensure that the operation of the proposed Mercure Yangon Kaba Aye Hotel and Service Apartment project complies with environmental standards, requirements of the environmental regulation and guidelines laid down by the Department of Environmental Conservation. The Environmental Management Plan (EMP) for operation phase was developed. The plan consists of potential impacts on physical, biological and social environments, relevant mitigation measures, implementation organization and responsible organization. The organization structure of a division for implementing EMP was set up.

In addition, the effectiveness of the environmental management and mitigation measure shall be monitored throughout the operation phases. The Environmental Monitoring Plan for operation phase was stated in the report. Monitoring will be carried out by the company's Project Management Unit. The appointed contractor by SCCP Prince Co., Ltd will supervise all activities relating to the Environmental and Social Management Plan (ESMP) and carry out supervision of the implementation of the mitigation measures and monitoring the results.

Conclusion and recommendation

It is to be concluded that this project proposed by SCCP Prince Co., Ltd will have positive impacts in improvement of social economic development of the country. People around the project area have no objection to Mercure Yangon Kaba Aye Hotel and Service Apartment perhaps the Hotel helps improving in local residents' business and security. Considering these positive socio-economic and environmental benefits as outcomes of the existing hotel the expert team has determined that there will be no considerable negative impacts from this project upon physical, social and biological environment.

The project should be allowed to proceed with the understanding and the proponent will adhere to the mitigation measures recommended herein and will further implement the proposed Environmental Management and Monitoring Plan.



SECTION 1 PROJECT DESCRIPTION

1.1 Background of the Project

Mercure Yangon Kaba Aye Hotel and Service Apartment is operated as a hotel and service apartment business by SCCP Prince Co., Ltd. which is located at No.17, Kabar Aye Pagoda Road, Yankin Township, Yangon Region.

Previously it was known as MiCasa Hotel Apartments Yangon, built with the permission of the Department of Urban and Housing Development since 1997 and completed its construction and obtained approval for commenced business in 1998 December 15. The property has been operating since 1999, managed by CHM Company. In 2016, as per approval from Myanmar Investment Commission (MIC), SCCP Prince Co. Ltd. has taken over the building and business from MiCasa Hotel Ltd. that has already been in operational. SCCP Prince Co. Ltd. rename the building and business as Mercure Yangon Kaba Aye Hotel and Service Apartment which is contracted with Accor direct management. Validity of investment permit is 50 years commencing from 1 – 1 – 1999.



Figure 1.1 Front view of Mercure Yangon Kaba Aye from Kabar Aye Road

Mercure Yangon Kaba Aye Hotel and Service Apartment is centrally situated along Kabar Aye Pagoda Road, one of the two main arterial roads leading out of the city centre to Inya Lake and just 15 minutes from Yangon International Airport as well as to the famed Shwedagon Pagoda by car. It is 4.54 km from downtown and 20 minutes to city centre, the famed Bogyoke Aung San Market, major sightseeing attractions.

Mercure Yangon Kaba Aye Hotel and Service Apartment embrace the Environmental Compliance Guidelines for New and Refurbished Hotels (appendix 11). It adopts sustainable development practices, Planet 21 which is launched by AccorHotels since 2016 particularly committed to environmental protection and sustainability.

The hotel has not only designed and constructed to improve indoor air quality, to reduce energy consumption, water consumption, to ensure guest health and comfort but also for training of hotel staff. Hotel Safety, Security and Risk Department has formulated Crisis Management Procedures, Emergency/Evacuation Plan, and Standard Security Operation Procedures. Mercure Yangon Kaba Aye Hotel and Service Apartment is found to be the one with sustainable operations and

maintenance (O&M) practices focus primarily on the actions of building occupants and encompass safety health and safety comfort and productivity.



Figure 1.2 Aerial View of Hotel

Source: mercureyangonkabaaye.com

With 150 permanent employees, currently Mercure Yangon Kaba Aye Hotel is providing hotel services and recreation activities. The application for operation of hotel business was already approved by Department of Health, Myanmar Fire Services Department, Yankin Township Development Committee.

1.2 Project description

Mercure Yangon Kaba Aye Hotel and Service Apartment project is built on the land of 1.944 acres designed and built by SAA Architects headquartered in Singapore. The hotel is seven-storey RC type building. Two passenger elevators with load capacity 750kg and one service elevator with load capacity of 1350kg are installed. There are 3 staircases for safe emergency evacuations and fire escapes.

There are 93 one bedroom studio / deluxe apartments which area is 48 sq m (517 sq ft) having either double or twin beds. Both one bedroom studio and deluxe are fully equipped with kitchen facilities. One bedroom deluxe apartment has additionally dining/living area. Two bedroom suites are 30 in total and their space area is 90 sq m (969 sq ft) with living and dining areas, two bedrooms with one King Size bed and two Single beds. Similar apartment, two bedroom Deluxe Suite, space area 100 sqm is 16 in total. Three bedrooms suite settle into 125 sq m of open space including a room with one King/Queen size bed and two single bedrooms are accounted for 5. Traditional Deluxe Rooms size 32 sq m are total in 40. As a whole there are 184 rooms or units.

There is a space of 297 sq m (3197 sq ft) functioning for event facilities such as meetings, conferences, cocktail parties and wedding ceremonies, etc. that can accommodate up to 210 guests. Moreover, there is outdoor swimming pool available for children.

All the hotel rooms are soundproof rooms with opening windows and importantly, there are rooms adequately accessible for travellers who are using wheelchair. Blackout facilities and audible smoke alarms are available as for security. The building comprises a total constructed floor area of 17,988 sq m. It includes 50 parking lots, in compliance with YCDC regulations.

1.2.1 Project location and overview map

Mercure Yangon Kaba Aye Hotel and Service Apartment is centrally situated along Kabar Aye Pagoda Road, and at the corner of at the corner of Sein Lè May Avenue in Yankin Township.

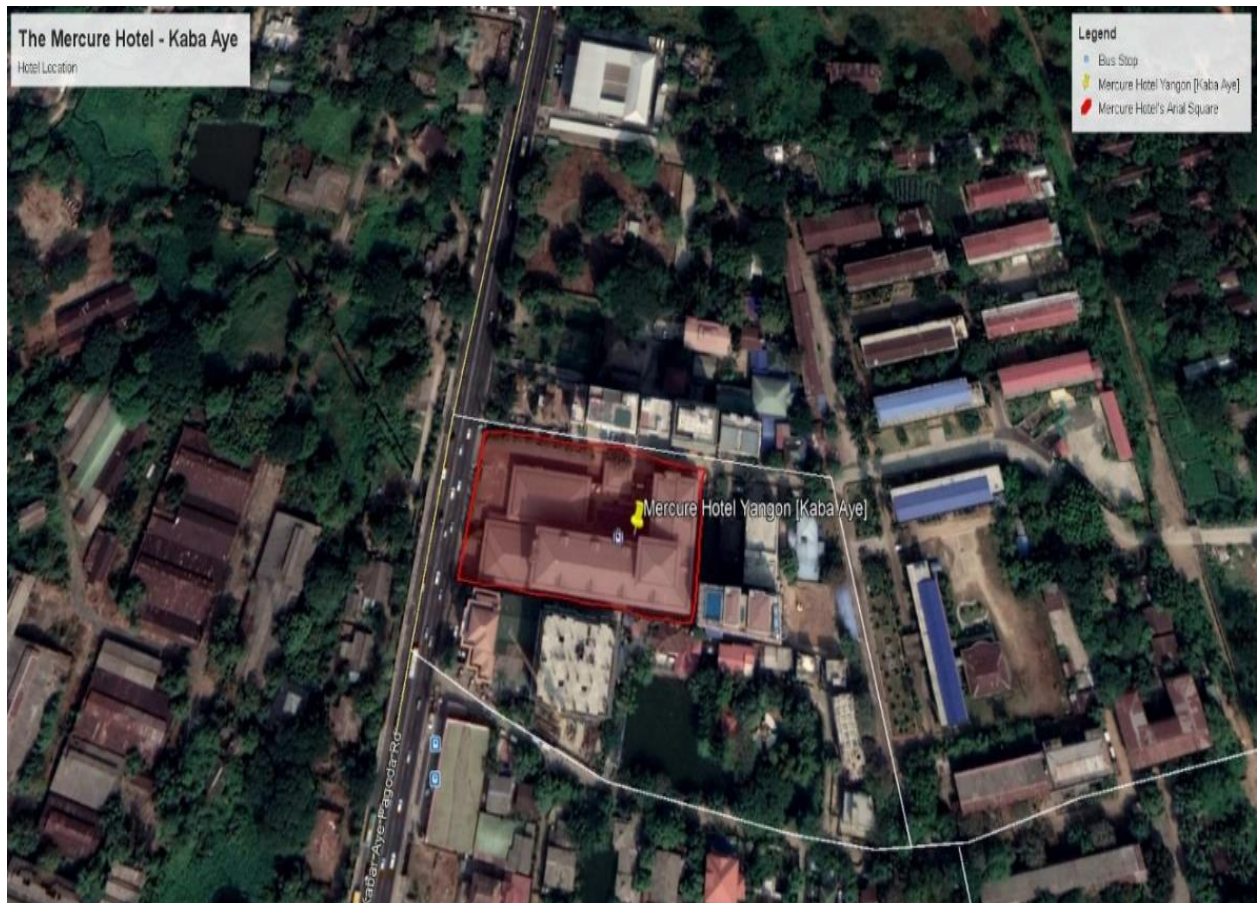


Figure 1.3 Project location showing on Google Earth picture

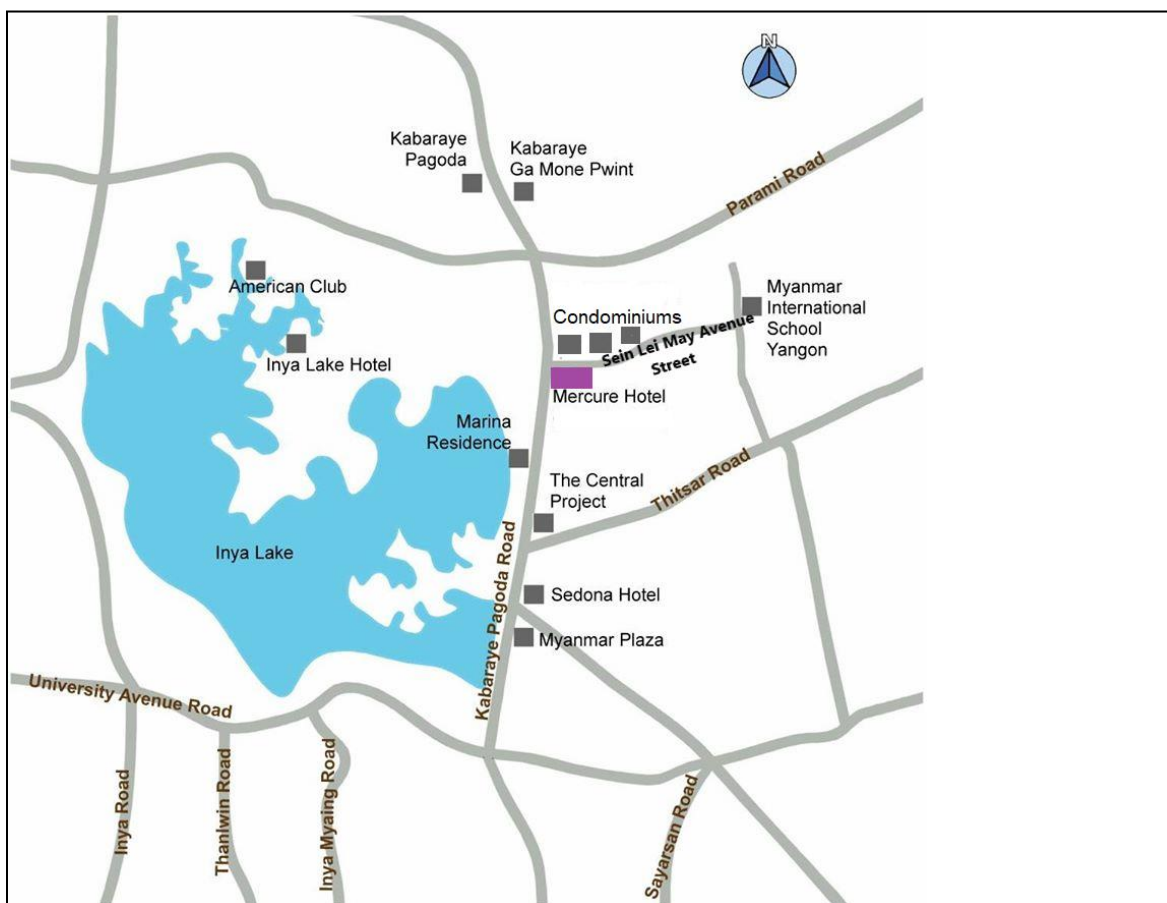


Figure 1.4 Project location map

1.2.2 Summary of the project

Project name: Mercure Yangon Kaba Aye Hotel	
Year of Permission to Develop the Project	7-8-2015
Owner	Department of Urban and Housing Development
Project Location:	No 17, Kabar Aye Pagoda Road, corner of Sein Lè May Avenue, Yankin Township, Yangon
Phone number:	+95 1 8650933
Design Architect:	SAA partnership (78 Shenton Way #24-00 Singapore 0207)
Area of Project	1.944 acres
Total construction area	17,988 sq m
Type of Building	RC 7-storey Building
Structure	Reinforced Concrete
Total no. of guest room	184 rooms
Total no of parking slot	50 slots

1.2.3 Summary data of the project

DATA ABOUT THE BUILDING		
Hotel Building:	7-Storey Building	
Service facilities	Hotel Services	
Ground floor	Main Lobby, coffee lounge, generator, fire and water pump room, firewater tank, water pump of treatment, treatment water tank, septic tank	
Level 1	Total No. of guest room = 40 with one bed Deluxe room; two meeting rooms and one staff training room	
Level 2	Total No. of guest room = 31 rooms	
Level 3	Total No. of guest room = 20 rooms	
Level 4	Total No. of guest room = 31 rooms	
Level 5	Total No. of guest room = 31 rooms	
Level 6	Total No. of guest room = 31 rooms	
Level 7	One Lift motor room, store room and main water distribution tank.	
Accommodation Types	Area	No. of room
Rooms		
Deluxe room King size = 24, Twin = 16	32 sq m	40 rooms
Apartments		
One Bedroom Deluxe/Studio Suite King size = 82, Twin = 11	48 sq m	93 rooms
Two Bedroom Suite King size = 15, Twin = 15	90 sq m	30 rooms
Two Bedroom Deluxe Suite King size = 8, Twin = 8	100 sqm	16 rooms
Three bedroom Suite - King/Queen Size Bed & two Single Bed rooms	125 sq m	5 rooms
Meeting room for 250 people	297 sq m	1 room
Kaba Aye Meeting room for 80 people	90.71 sq m	1 room
Kaba Aye Meeting room for 50 people	65.39 sq m	1 room
Elevators and staircases:	Usage Guest elevator 11 persons (750)kg and service elevator 20 persons (1350) kg	Total 3 Elevators Set, 2 Elevator for Guest & 1 Elevator for Services & Fire, Total 3 Staircases
Electricity	YESC from South Kaba Aye substation	
Transformer	50.66 sq m	1250 KVA Transformer 2 Units

Sewage treatment system	150.5 sq m (underground)	1 room
Car Parking	551.32 sq m	For 50 vehicles

1.2.4 Site layout plan

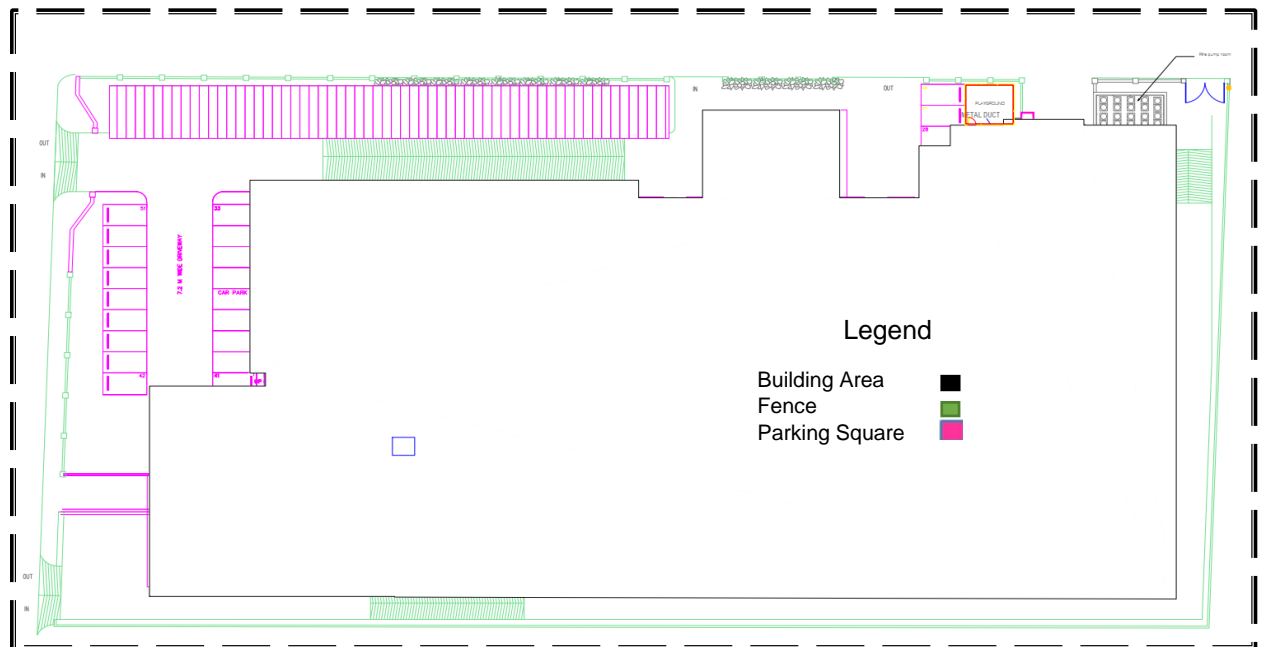


Figure 1.5 Site layout plan (Clear figure in Appendix-1)

1.2.5 Organization of the floors and floor plans

Ground floor

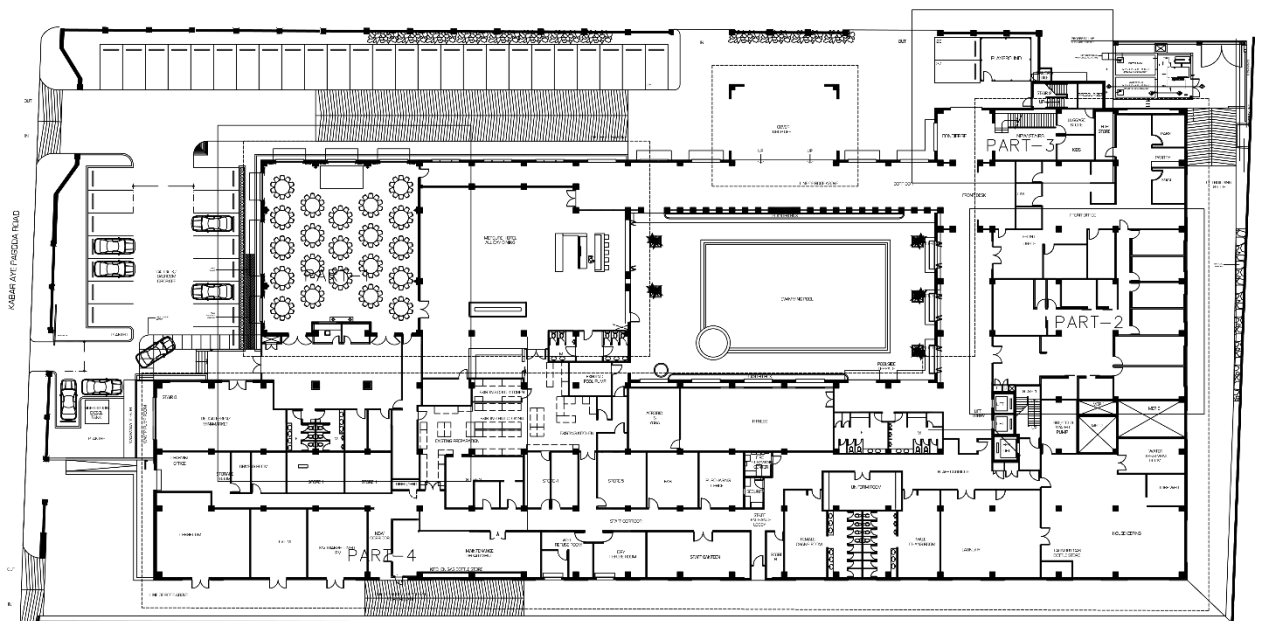


Figure 1.6 Floor plan of ground floor (Clear figure in Appendix-2)

Main lobby, front office, coffee lounge, all day dining room, event hall, aerobic and yoga room, fitness room, kids' room, and playground, kitchens, pantries are on the ground floor. One

delicatessen/ minimart on the ground floor is accessible for any guest. Genset / Generator room, transformer room, maintenance department, wet refuse room, dry refuse room, water pump room, firewater tank, water pump of treatment, and treatment water tank are also on the ground floor and can be accessed from outside. Additionally, housekeeping department, purchasing office, staff canteen, female/male change rooms, uniform room, luggage store room, store rooms, storage room, kitchen gas bottle store room, laundry gas bottle store room, and laundry room are all on the ground floor.

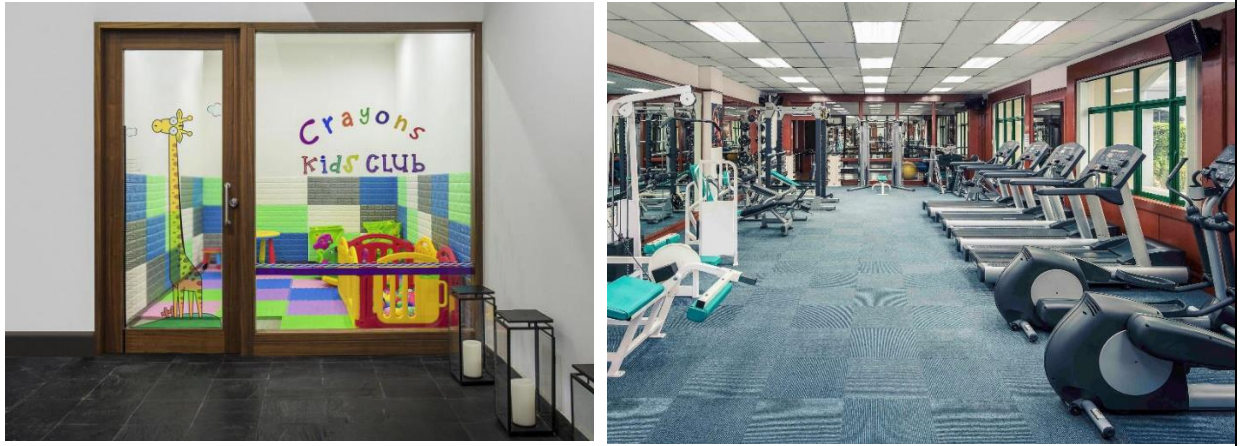


Figure 1.7: Kids' rooms and fitness centre

1st floor (Level 1)

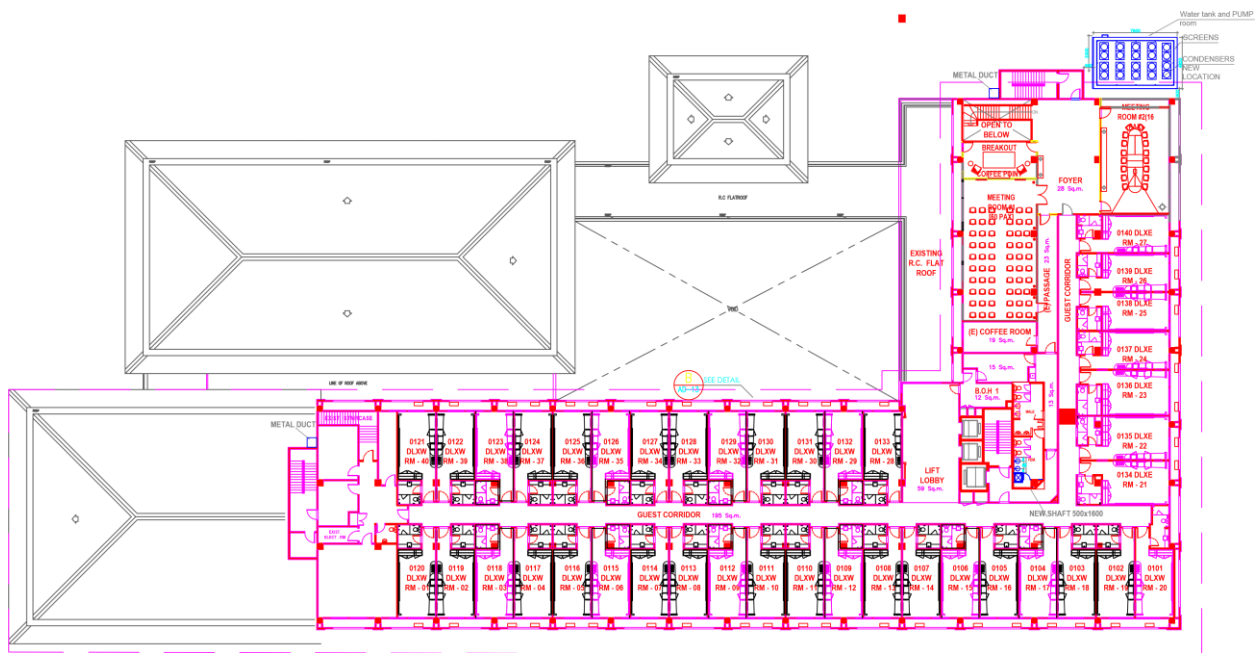


Figure 1.8 Floor plan of level 1 (Clear figure in Appendix-3)

There are 40 Deluxe King Size guest rooms where space area of each room is 32 sq m and two meeting rooms attached with coffee rooms. One meeting room accommodates for 60 persons and another meeting room accommodates for 16 persons. There is also a room for water tank and pump.



Figure 1.9 Deluxe King Size room



Figure 1.10 Meeting room

2nd floor (Level 2), 4th floor (Level 4), 5th floor (Level 5), 6th floor (Level 6)

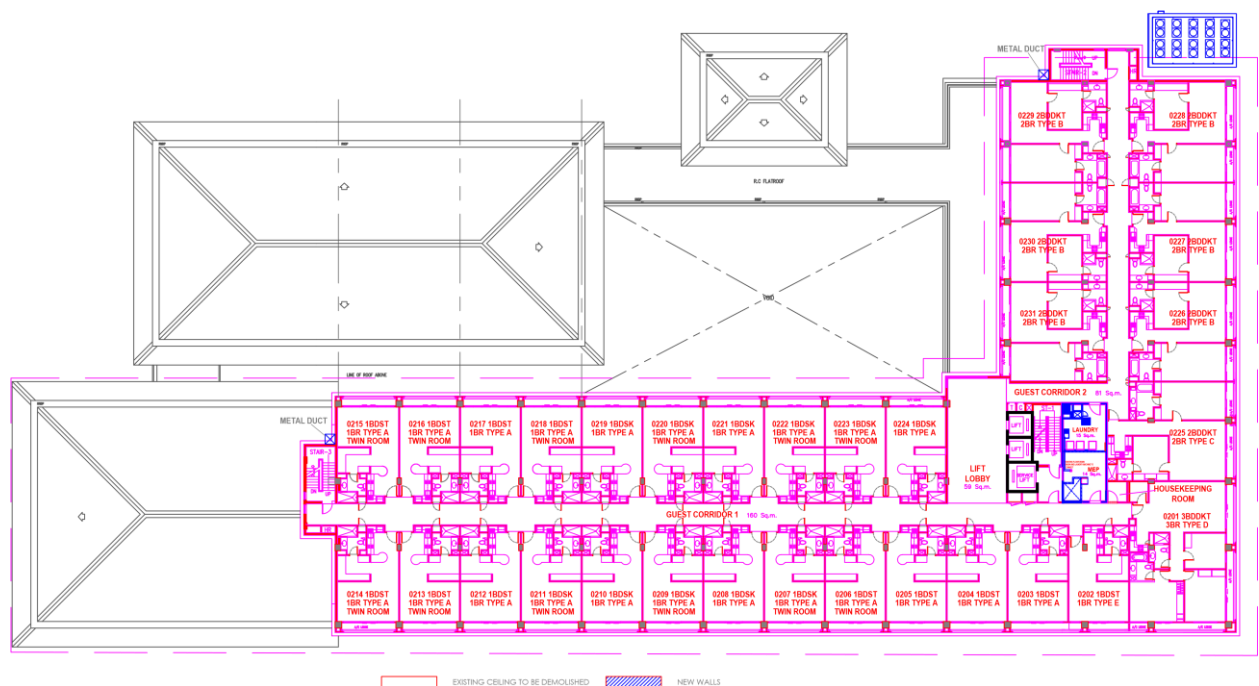


Figure 1.11 Floor plan of level 2,4,5,6 (Clear figure in Appendix-4)

On level 2, 4, 5, and 6, each level has total 31 guest rooms. The designs and layout plan of rooms are the same in these levels. There are 23 units of One Bedroom, 7 units of Two Bedroom apartments and 1 unit of 3 Bedroom apartment which are fully equipped kitchen facilities.



Figure 1.12 Apartment with facilities

3rd floor (Level 3)

There are 20 guest rooms in level 3. Among them 4 units are apartment with 3 bedrooms where a kitchen and laundry facilities are included. A two bedroom apartment is also in level 3. Housekeeping room is on this level where the staff use it to hold training.

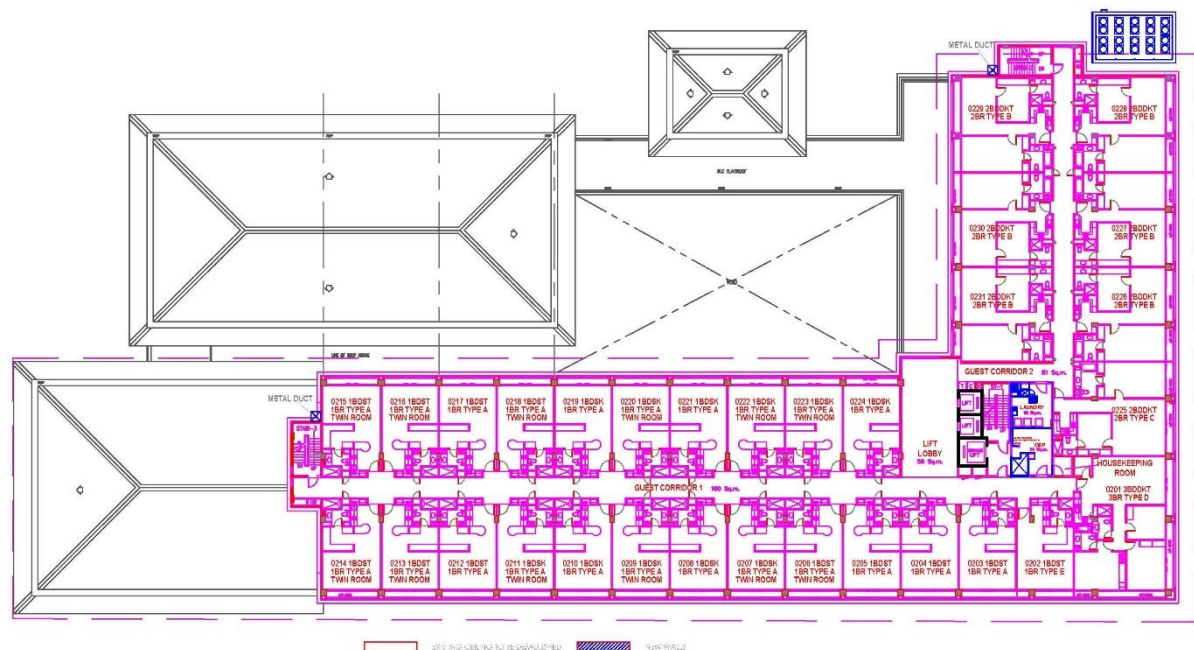


Figure 1.13 Floor plan of level 3 (Clear figure in Appendix-5)

7th floor (Level 7)

One lift motor room, store room, and main water distribution tank are situated on the top floor.

1.3 Project Land Use

The 7-storey hotel is constructed at the total demarcated land area of 1.944 acres. The land is situated on at No.17, Kabar Aye Pagoda Road, Yankin Township. The land is owned by Department of Urban and Housing Development, Ministry of Construction, Union of Myanmar.

1.4 Access Road

Kabar Aye Pagoda Road is a main road to reach the proposed project site. The road is a six-way line with 20 meters (66 ft) wide, running in the north-south direction, downtown to suburban. It is one of the busiest public road belonging to YCDC and both 4ft wide sidewalks are paved by concrete. The road intersects to the Parami Road at north, which runs through east-west direction and T-junction with Thitsar (Kanbe) Road at south, which runs through east-west direction.

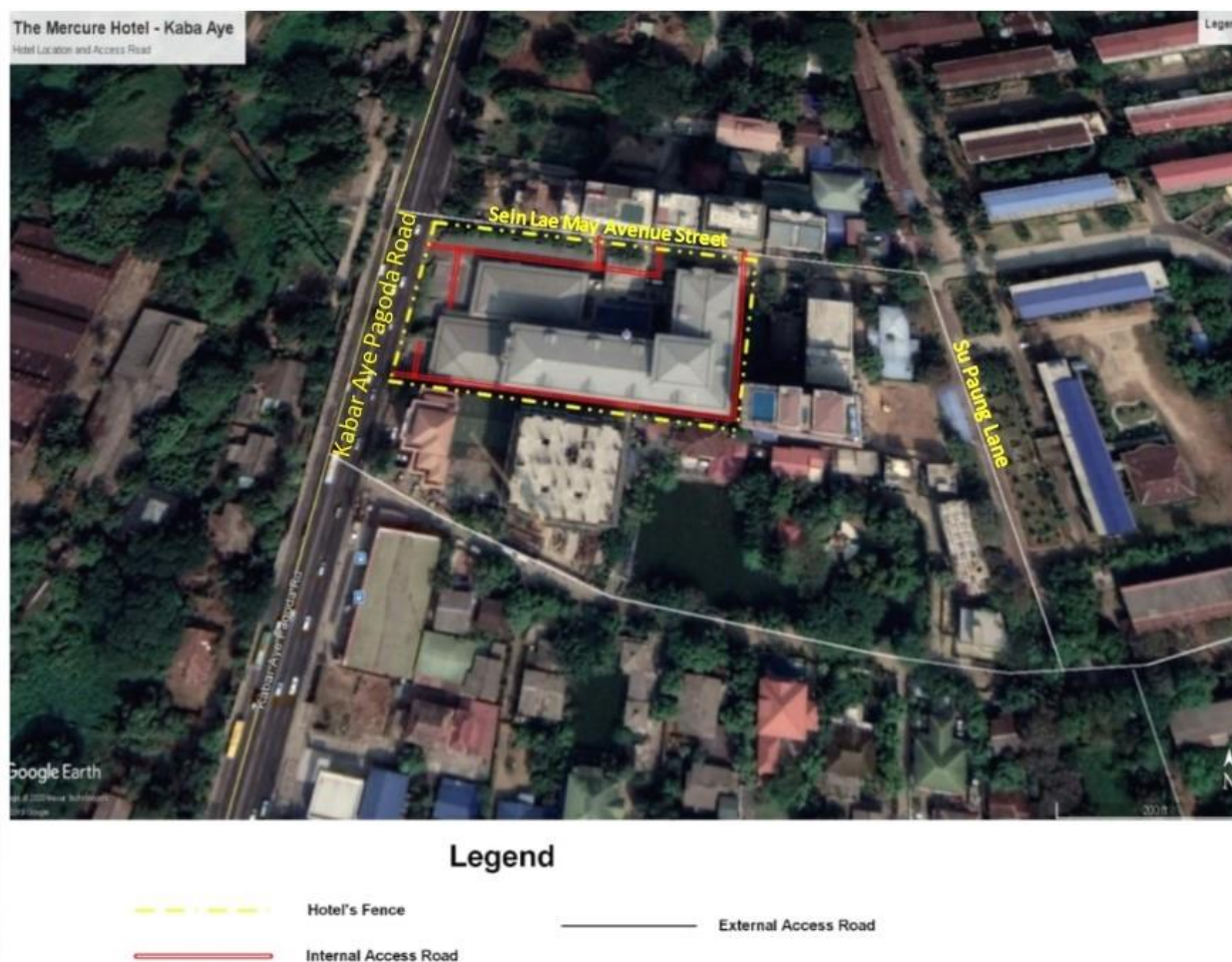


Figure 1.14 Access road to Mercure Yangon Kaba Aye Hotel and Service Apartment

Vehicles lead to north, which enter to proposed project site will take inner right lane and vehicles exit from the proposed project site will take same lane. Sein Læ May Avenue Street is a continuity of Su Paung Lane. Alternative access to the hotel is from Su Paung Lane that has connection with Sein Læ May Avenue Street.

1.5 Electricity Supply and Consumption

Yangon Electricity Supply Corporation (YESC) of Ministry of Electric Power (MOEP) is the primary Electrical energy supplier for the Mercure Yangon Kaba Aye Hotel and Service Apartment. By means of high voltage 6.6 KV three-phase powerline, the electrical powerline is connected to South Kabar Aye Sub distribution station. Then, it is separated into dual channels into two 1250 KVA transformers controlled by Vacuum Circuit Breakers (VCB). The purpose of splitting up the input power line into two separate substations is while one line is on loading, the remaining line is set as backup. The transformer steps down into 415 V in parallel and finally distribute to the hotel electrical utility in 220V 1600 A in Automatic Transfer Switches (ATS) and Coupler. Two separate 750 KVA HSD-diesel generators are also installed for emergency power source during power cut occurred from the Electricity Supply Enterprise (ESE) source. The fuel consumption of single generator is recorded at 13 gals/hour. The full description of electricity supply system is shown in the appendix 9 and appendix 12. The following photos presents power stations found in the hotel's premises.



Figure 1.15 Primary and Back-up Power Source of the Mercure Yangon Kaba Aye

Unlike water consumption, which is in seasonal and temporal variation, the energy consumption exists 24 hours of the day in the hotel operation. In addition to the loading from guest rooms, while office functions active only in the working hours, utilities and entertainments (i.e. HVAC, lifts, audio-visual systems, etc.) and night lighting systems required continuous power supply. Therefore, ensuring utilizing energy saving devices and appliances is prime importance. It has

been noted that the Mercure Yangon Kaba Aye Hotel and Service Apartment exercises planet 21 action which is to conserve energy and environment proclaimed by the Accor. It's been observed that daily average energy demand is 2400 Kwh (+/- 10%) during wet and cold weather. However, this figure tends to increase up to 3200 Kwh ((+/- 10%) during dry and hot ambient condition. The Mercure Yangon Kaba Aye Hotel and Service Apartment has been regarded as one of the top energy savers among its counterparts. The HSD diesel expense for back-up generators units could not be speculated since the system is only in service during temporary power cut from ESE's source and intermittent generator efficiency test. Nevertheless, as the provision for energy sufficiency, underground – steel tank with 3800-gals HSD diesel storage has been provided.

1.6 Water Supply System and Consumption

Access to water for domestic application and hygienical purposes in the Mercure Yangon Kaba Aye Hotel and Service Apartment relies on two major sources (viz. YCDC supply and deep tube well). The Gyo Phyu Pipeline which is located about 500 meter away from east of hotel is destined as primary water source for the whole hotel operation. According to the government's figure, this pipeline conveys 93,300 m³/day from Gyo Phyu dam which is 64 Km to the north of Yangon City with 166,000-million-gallon storage capacity. As the backup measure, a deep tube with 200 m depth had been established inside hotel compound. Therefore, by combination of these two water sources can assure the hotel's water demand. The location for the access to the water sources are shown in Figure 1.16, 1.17.

Initially, as cache storage, the underground water storage tank with 15,400-gal capacity is build up. Then, the water is pumped into 2 overhead tanks with 17,160-gal capacity by pump action after passing through water treatment system. This collected 34,320 gal of water is distributed to consumers and dispensing outlets across hotel's water utility network. It has been noted while from ground level to level 4, gravity flow is applied in the system whereas for level 6 and level 5 pressurized system with vessel tank is applied for the user comfortability. The full schematic diagram and photos are described in the appendix 7 and appendix 8.

Based on the site visit and hotel information obtained from the collaboration meetings among the Mercure Yangon Kaba Aye Hotel and Service Apartment and the MSR, it has been reported that 184 rooms are available for accommodation and there are about 200 hotel staff from all the departments. Thanks to the combined source of YCDC water supply and deep well, although water supply meets full demand of the hotel operation, the water consumption in hospitality industry can post a concern for the hotel operation cost and the environment. Unnecessary use of water and wastage from hotel functions can also lead additional burden to the sewerage treatment plant and public nuisance.

Therefore, water budgeting within hotel boundary is crucial in evaluating eco-friendly and environmentally friendly measures practiced in the hotel.



Figure 1.16 Major Sources of Water Available for the Hotel from YCDC



Figure 1.17 Water source from Tube Well

The water consumption of the hotels also depends on several related factors (i.e. operational, occupancy and appurtenances). It has been reported that the average daily water consumption of the hotel by 60% guest occupancy rate is counted at 120-130 m³/day. This figure could fluctuate about 10% +/- base on the seasonal variations and public events. In conformity to the Accor's Environmental compliance standards for New and Refurbished Hotels (2019/Rev 1.0), the Mercure reported that it endorses these standards and ensure reduce water consumption in its daily business functions. Therefore, water saving water supply fixtures and appurtenances are installed in its distribution networks.

1.7 Water Treatment

In conjunction with the aforementioned water supply system (4.5), the Mercure Yangon Kaba Aye Hotel and Service Apartment employed 3 stages filtration process for treating unprocessed or raw water from both sources (i.e. YCDC and in-house tube well). Prior distribution toward users, raw water is passed through following in order:

- (1) Quantum Filter
- (2) Carbon Filter, and
- (3) Cartridge Filter.

Treated water is then pumped into two roof tanks for subsequent distribution as domestic application. The installation of 3 different filtration system provides with water in adequate physical, chemical and biological characteristic by straining colloidal and settleable particles and aquatic biome present in the distribution conduit of surface and subsurface sources. The appendix 8 shows Water Treatment System integrated in water supply system of the hotel. To meet the demand, filtration processes is accelerated by transfer pump. This treatment system capacity has been gauged as 300 m³/day during service life of the filters.

Portable drinking water has been imported from both local and international suppliers (viz. alpine and evian).

1.8 Wastewater Treatment and Disposal

Combined Sewer system is integrated in the Mercure Yangon Kaba Aye Hotel and Service Apartment. To be further elaborated, three major sewer sources (i.e. sanitary, domestic, and septic) are collected into underground wastewater treatment facility where the combined influent is treated, then discharged as effluent into public sewer channel. The full schematic diagram of wastewater treatment and disposal is presented in appendix 10.

The wastewater treatment is incorporated into following Zones.

Chambers and clarifiers

Aeration Tank

Sludge Holding Tank

Effluent Tank

Chambers: This zone receives wastes (both solid and liquid). By means of grit and screen, wastes in either solid or semi-solid are first disintegrated or liquefied by means of sudden drop into the chambers. Then the mixture of smaller waste scraps is conveyed into the aeration tank after passing through the clarifiers.

Aeration Tanks: The main function of this zone is for further biodegradation through aeration. Thereby, evolved sludge hanging on the top of the tank is overflowed into sludge holding tank. The active aeration enables mixing mechanism along the air flow from the diffusers. Therefore, minute leftovers are confined by another clarifier. They are continuously being subjected to solubilize and liquefied by both aeration and be fed up by aerobic bacteria.

Sludge Holding Tanks: The overflowed sludge are accumulated in this tank. The slugged are then digested further by the facultative and anaerobic micro-organism.

Effluent Tanks: This tank receives the liquid discharged from aeration tank after passing through clarifiers with smaller openings. The characteristics of wastewater in this zone is controlled to meet the effluent guidelines of the environmental regulator. By means of chlorination and prolong retention, physical and biological properties of wastewater is optimized in the tank. Finally, flowing through multiple effluent tank, the final wastewater is discharged into sewer outfall which is the receiving public drain located nearby.

1.9 Solid Waste Disposal System

The waste management system applied in the Mercure Yangon Kaba Aye Hotel and Service Apartment was found cache system. Generated wastes from all sort of hospitality and catering service are first separated into dry and wet which are stored separated inside airtight storage room. While dry garbage is first sorted into several categories (i.e. plastics, papers, cans, glasses, etc.) based on recycling capability, while wet garbage and refuse are stored inside the cold storage room prior collection by municipal service provider, the YCDC. The cold garbage storage room is 6 m³ storage capacity and they are enclosed into airtight sacks before transfer. The experience of waste disposal practiced in the Mercure Yangon Kaba Aye Hotel and Service Apartment is also stated in the photo session of the appendix 12.

1.10 Drainage System

The storm water from torrential rain is designed to be collected separately in the Mercure Yangon Kaba Aye Hotel and Service Apartment. It has been surveyed that the provision for storm drain is constructed in 1m² diameter circular closed conduit. The manholes for access into the drain for inspection where placed at 30m apart along the central drain channel. The manhole closures are made in rectangular cast iron with 1-2 cm openings. In order to avoid inundation within hotel compound, two major storm drain has been found on each side of the hotel structure. The location of storm drain is shown in Figure 1.18.

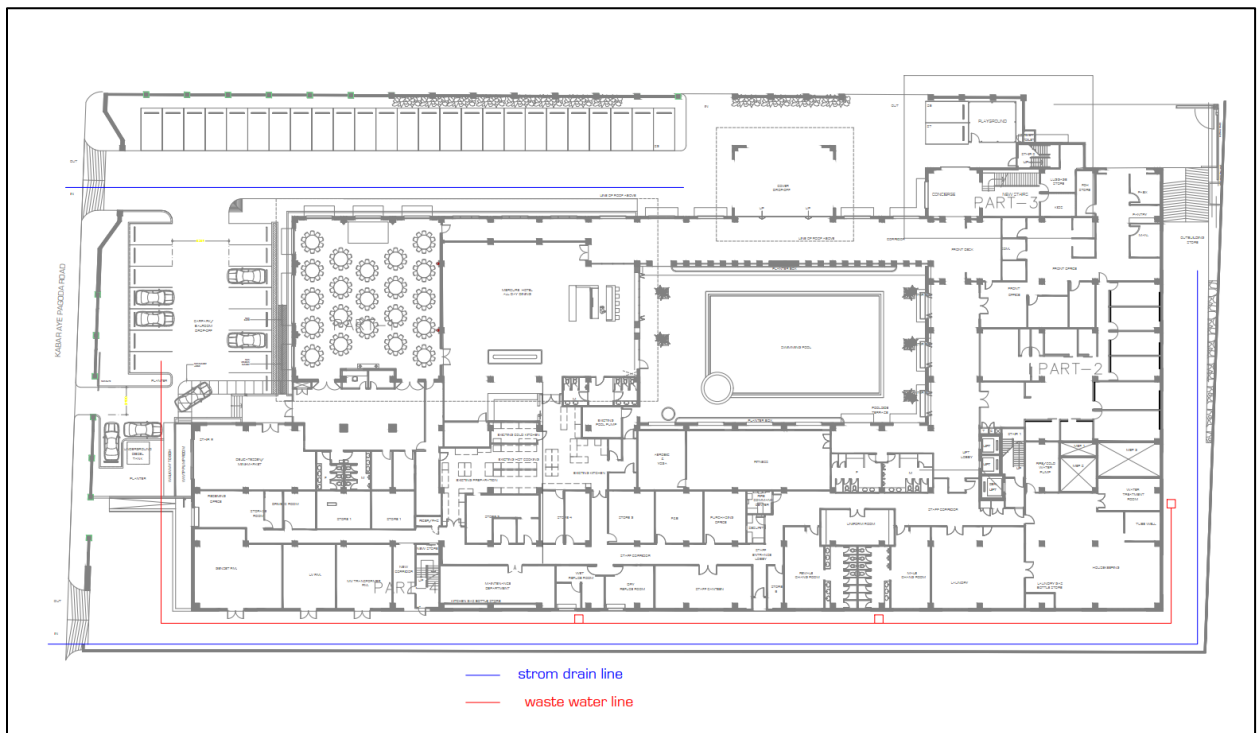


Figure 1.18 Location of the Storm Drain Line in the hotel compound. (Clear figure in Appendix-6)

1.11 Cultural Heritage

1.11.1 Free from cultural heritage influence

The Project Site is located along Kabar Aye Pagoda Road at the corner of Sein Lè May Avenue in Yankin Township. It is located at a place a long way (6.4 km) from the Shwedagon Pagoda and free from the influence of any ancient pagoda or religious edifice.

The YCDC has placed a limit on the height of new buildings to be constructed so that the public view of the Shwedagon Pagoda would not be obstructed.

According to the height limitations of buildings constructed in the Restricted Zone around the Shwedagon Pagoda laid down by the YCDC's Committee for Quality Control of High-Rise Building Construction Projects (CQHP), the height of buildings constructed in Restricted Zone 1 and Restricted Zone 2 around the Shwedagon Pagoda must not exceed 190 feet (58 m) above sea level (ASL), which is the ASL elevation of the floor of the Shwedagon Pagoda.

However, high-rise buildings constructed outside the Restricted Zone could rise up to 417 feet (127.5 m) ASL. According to CQHP, no building constructed outside the Restricted Zone could exceed the level of the base of the *nget pyaw phoo*¹ part of the Shwedagon Pagoda which stands at 417 feet (127.5m) ASL. The height of Mercure Yangon Kaba Aye Hotel and Service Apartment is 23.7 meter. Therefore, CQHP's height limitation is no issue for the Project.

1.11.2 Obstruction of the view of the Shwedagon Pagoda

This is also no issue for the Project as it is far away (6.4 km) from the Shwedagon Pagoda. In existing conditions, no view of the Shwedagon Pagoda could be glimpsed from ground level of public space in the general area of the Project.

1.12 The Mercure Yangon Kaba Aye Status Quo

Previous MiCasa Hotel Apartments Yangon, managed by CHM group in Yangon was rebranded to Mercure Yangon Kaba Aye Hotel and Service Apartment in 2017 and the re-brand hotel is now managing by new management group, AccorHotels. Under the supervision of General Manager and Resident Manager, nine main departments namely, Front Office Department, Finance Department, Food and Beverage Department (Food Production and Kitchen Department), Housekeeping Department, Maintenance Engineering Department, Safety and Security Department, Purchase and Store Department, Sales and Marketing Department, and Personal and Human Resource Department are operating the hotel in accordance with AccorHotels' commitment of environmental protection and sustainability. Mercure Yangon Kaba Aye Hotel and Service Apartment practises the action plan of Planet 21 which is launched by AccorHotels in 2011. Basically, Accor has adopted numerous solutions to contribute to the development of local communities, reduce water and energy consumption and limit the environmental footprint of its hotels.

Mercure Yangon Kaba Aye Hotel and Service Apartment has programmes for community development by supporting in orphanage in Thanlyin Township, helping the neighbouring monasteries with cleaning the compound, and donating for water supply at places where in need.

To reduce energy consumption Mercure Yangon Kaba Aye Hotel and Service Apartment has installed light-emitting diodes (LEDs) in the guest corridors and passages and as for air-conditioning system compact unit of air-condition are fixed in guest rooms.

Concerning water conservation for both the environment and hotel expense Mercure Yangon Kaba Aye Hotel and Service Apartment installed dual flush toilets in guest rooms that has two different flush settings, one lever for liquid waste and another lever for solid waste. The flush for liquid waste uses about 0.8 gallons of water per flush while the flush for solid waste uses about 1.6 gallons of water per flush.

Mercure Yangon Kaba Aye Hotel and Service Apartment is actively practising plastic reduction programme to reduce plastic pollution. Consumption of single-use plastics are avoided in F&B,

¹ Literal meaning is 'banana bud'. Dictionary definition is 'tapering, spire-like part of a pagoda immediately below the finial where its shape resembles a plantain bud'.

and housekeeping. Plastic laundry bags, plastic laundry baskets, and plastic slippers are no longer used and replaced by baskets and slippers woven from rattan and bamboo. Plastic clothes hanger are also replaced by wooden hangers. Drinking Water Dispensers are placed in the guest rooms, GYM and RTW (Ready to Work) office instead of plastic bottles. Refill water glass bottles, glasses and ceramic cups are used instead of plastics (Figure 1.19).

Figure 1.19 Pictures of Planet 21 activities. Using refill water bottles and glasses instead of single-use plastic.



They produce soaps by recycling the small insignificant pieces of soap from guests' bathrooms and kitchens. Those recycled soaps are going to be donated in orphanage as part of CSR programme (Figure 1.20).



Figure 1.20 Making recycle soap as Planet 21 activities

Housekeeping is also practising Towel & Linen Reuse Programs to save water, electricity and soap, to reduce labour and sewage costs and to lessen wear and tear on cloths. Despite the limited spaces to grow plants in the compound that Mercure Yangon Kaba Aye has possessed they manage to make a small herb garden at the back, right side of the building. In addition, they grow indoor plants in the building to keep green.

Regarding hotel revenue, it is generated not only from guest rooms and apartments rentals, but also from membership club's fees of fitness centre and swimming pool. Rental of meeting rooms with concierge facilities, rental of event hall, preparing for banquet, rental of ready to work rooms with concierge facilities (Figure. 1.21, 1.22, 1.23).

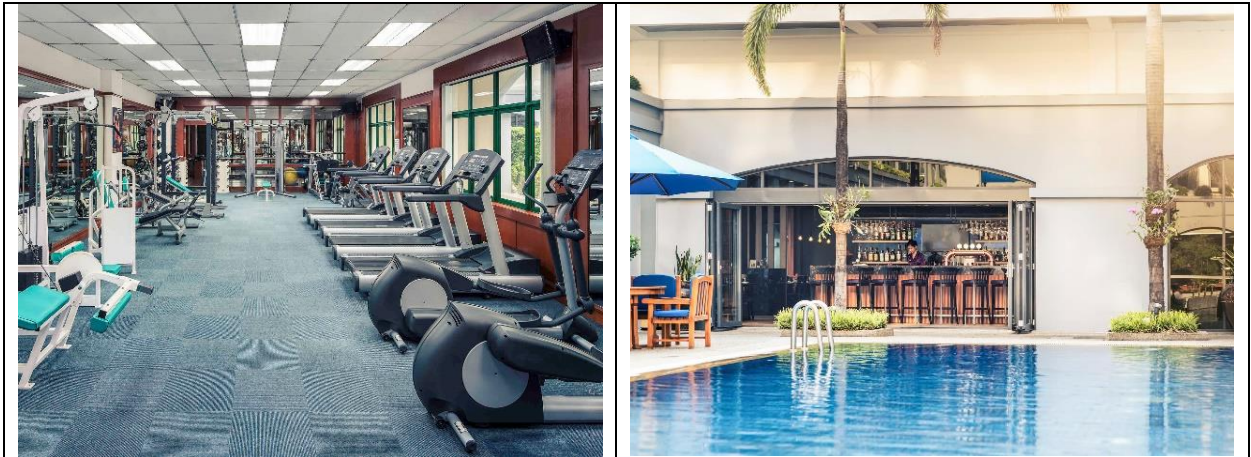


Figure 1.21 Pictures of fitness centre and swimming pool.



Figure 1.22 Pictures of meeting rooms

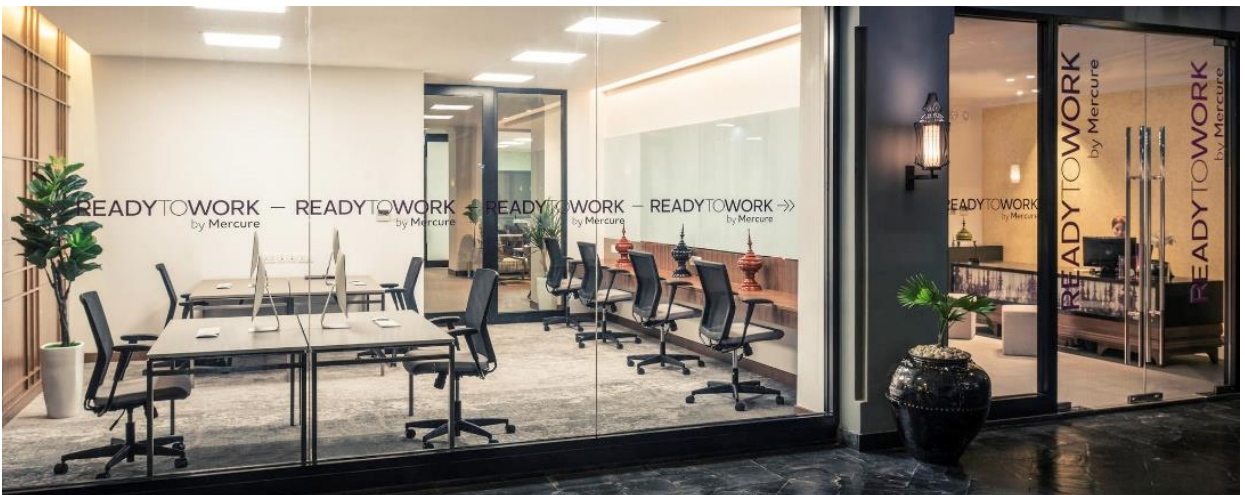


Figure 1.23 Pictures of 'Ready to Work Room'

Source: mercureyangonkabaaye.com

1.13 Analysis of Project Alternative

The consideration for project alternative is not applicable at this stage since the business model is not the new hotel construction nor extension project. The proof of the corporate acquisition and property transfer evidence from MiCasa Hotel Ltd to SCCP Company Limited is attached in the appendix 19.



Mr. Choo Kong Thein, Director
Mr. Lee Chee Kian, Managing Director
Mr. Lee Jing Yang, Director

Organization of the Hotel



SECTION 3. IDENTIFICATION OF THE IEE EXPERTS

3.1 The Requirement of the IEE Study

Since SCCP Prince Company took over the business in operation 20 years ago, Initial Environmental Examination (IEE) has not been carried out. Presently, SCCP Prince Company was instructed by MIC to conduct an IEE study, prepare EMP, and obtain ECC in compliance with the requirement of Ministry of Natural Resources and Environmental Conservation (MONREC). Hence, SCCP Prince Company Limited shall carry out as per instruction made by MONREC in which to conduct IEE process and an Environmental Management Plan (EMP) which describe the measure to be taken for preventing, mitigation and monitoring significant environmental impacts resulting from the implementation and operation of proposed project or business or activity has to be prepared and submitted and to perform activities in accordance with EMP and in compliance with the environmental policy, Environmental Conservation Law and other environmental related rules and regulations.

Therefore, SCCP Prince Company has commissioned Myanmar Survey Research (MSR) an independent private research firm which certified by Department of Environmental Conservation of the Ministry of Natural Resources and Environmental Conservation in Myanmar to undertake an IEE study to ensure that the project will not only be environmentally sound but also acceptable to local communities. MSR shall conduct IEE process sufficiently and soundly and submit the complete IEE to the Environmental Conservation Department of the Ministry of Natural Resources and Environmental Conservation through MIC. Thereupon, MSR had formed a study team composed of various experts to carry out the research and survey work.

This study aims at assessing the environmental aspects and impacts of the proposed project and analyzing all measures to minimize any potential negative impacts and enhancing the potential positive impacts resulting from construction and operation of the project.

In conducting the study, the initial work will involve collecting baseline data of the project both for existing biophysical environment and socioeconomic conditions of the project-affected areas, since the description of the existing background or affected environment is an integral part of an environmental impact study.

3.2 Objectives of IEE

The objectives of this IEE study are:

- to obtain baseline information and examine the existing environmental situation on and around the project site and socio-economic situation of the community—people on or near the project site
- to identify the potential impacts (positive and negative) of the project that will affect the people living around the surrounding area of the project and the areas in its influence
- to recommend mitigation measures to minimize the negative impacts and to enhance the positive impacts upon socioeconomic and biophysical environment

3.3 A Statement of Requirement of the IEE Study

According to the existing law, procedures and notifications of the Ministry of Natural Resources and Environmental Conservation for managing environmental and social economic impacts of businesses, services, investment activities and any kind of investment projects which are categorized as the project that could impose significant impacts on the physical environment, ecosystems, humans and other living beings is compulsory to conduct the systematic environmental impact assessment in order to decide whether such a project should be permitted or not in specific areas.

Likewise, an IEE recognizes that there is a strong link between environmental sustainability and social economic development in doing investment businesses in the country. The immediate objectives of an IEE are:

- to improve the environmental design of the project,
- to ensure that resources are used appropriately,
- to identify appropriate measures for mitigating potential impacts of the proposed project.

In addition to these objectives, an IEE also encompasses specific long-term objectives. These objectives include (a) avoidance of irreversible charges and serious damage to the environment, (b) safeguard valued resources, natural and cultural heritage and ecosystem which are invaluable for the future generation.

Having understood IEE procedures, requirements set by the Environmental Conservation Department and its rules and regulations, the proponent of Mercure Yangon Kaba Aye Hotel and Service Apartment project shall submit IEE report after conducting stakeholder engagement and public hearing meetings.

3.4 The IEE Expert Team

Myanmar Survey Research is a leading research company in Myanmar with more than 20 years of research experiences in social, marketing, industry and environmental and social impact assessment. The EIA assessment team of MSR has been formed for conducting the IEE study. The list of the environmental and social experts is shown in the table (Table 3.1, Figure 3.1). Further the contact detail of MSR EIA team is also demonstrated.

Table 3.1 MSR's EIA team

Name and designation	Position in team	Responsibility
U Kyaw Hlaing President	Leader	Overseeing the EIA/ESIA assessment process and the project
Dr. San Tun Aung Senior Adviser	Dy Leader	Advising on socio-economic impact assessment and editing the report
U Aung Lin Social Impact Assessment Consultant	Member	Co-writer of ESIA report and gathering data (Social impacts)
U Ko Ko Soe Lwin Thaw (a) Ko Soe GIS & IT Specialist	Member	Cartography, photography and designing report
U Oo Kyaw Maung Policy Specialist	Member	Policy specialist Specialize on laws, by-laws and regulations of Myanmar related to EIA/ESIA
U Kyan Dyne Aung Environmental Engineering Management Specialist	Member	Conducting research and designing the environmental management plan and report writing
U Phone Myint Tun Consultant, Physical Environment	Member	Air Quality & Noise Level Assessment Hydrology, Geology & Soil Studies
Dr. Aung Myint Thein Biological Impact Assessment Specialist	Member	Biological Impact Assessment and Preparation of written documentation
U Yel Nyan Linn Fauna Specialist	Member	Conducting Impact assessment and developing mitigation measures for ecology and biodiversity

Dr. Mon Mon Tin Oo Consultant, Social Research	Member	Conducting Social Impact Assessment and report writing
Htay Aung Pyae Consultant, Environmental Impact Assessment	Member	Conducting Impact assessment and developing mitigation measures for Physical Environment, and report writing
Government agencies that provide lab results		
Relevant Agencies		Lab tests performed
Occupational and Environmental Health Division		Water quality analysis
Land Use Division of Department of Agriculture		Soil interpretation and soil analysis; soil water extraction interpretation and soil water extraction analysis
Plant Protection Division of Department of Agriculture		Heavy metal analysis of soil sample



Figure 3.1 MSR team in the meeting

Contact details of MSR

Company Name:	Myanmar Survey Research Co. Ltd.
Company Address:	MSR Head Office Yangon-Central-Railway Station Building, Mingalar Taung Nyunt Township, Yangon
Country:	Myanmar
Websites:	http://www.myanmarsurveyresearch.com
Tel:	+95-1-370464
Fax:	+95-1-254263
E-mail	msr@myanmarsurveyresearch.com
Qualifications and Experience of MSR	Established in 1995, Myanmar Survey Research company has been providing research and consultancy services for more than twenty years to local and international firms including international organizations like UN agencies, World Bank and INGOs in Myanmar. MSR is certified by Department of Environmental Conservation of the Ministry of Natural Resources and Environmental Conservation. Besides ESIA assessment services for different types of projects in Myanmar, MSR also offers market, social and industry research services.

3.5 Components of the IEE

In IEE refers to the systematic assessment of a proposed project, business, service or activity to determine if it will significantly impact the physical environment and ecosystems, humans and other living beings including negative health or socioeconomic impacts. The assessment has to measure physical, biological and social impacts in order to gauge the overall impact of a project (Figure 3.2).

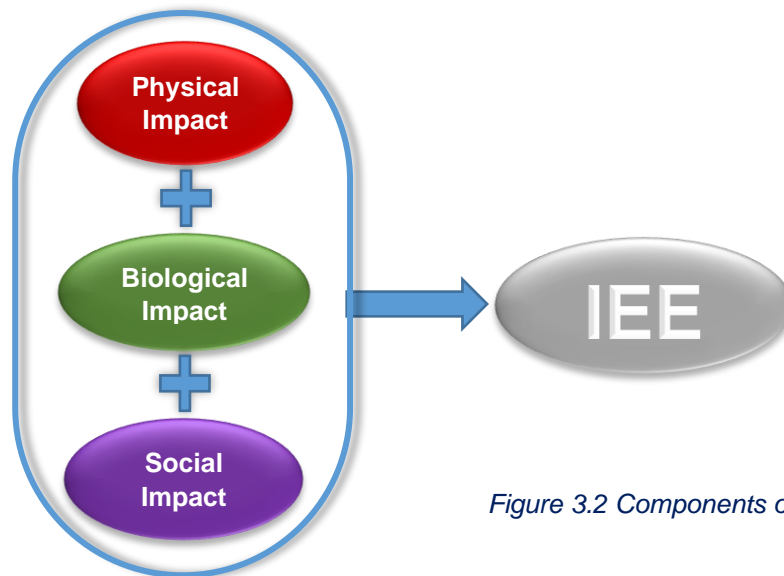


Figure 3.2 Components of the IEE

3.6 Approach and methodology of IEE

MSR study team conducted the IEE according to the following procedures. The IEE report was prepared according to the Environmental Impact Assessment procedures and related rules and regulations. As the first stage, literature reviews including the reports of similar projects, International standards and technical EIA guidelines and procedures, relevant laws, regulations and guidelines for environmental approval in Myanmar were carried out. The information gathered from literature review was used as research inputs for this report (Figure 3.3).

During the site visit to the project area and the surroundings at second stage, the existing project site features, surrounding land use pattern, the physical environment: climate, topography, soil type, air quality, water and electricity supply to the proposed project were observed and recorded. The onsite socio-economic survey was carried out in the possibly project affected areas. The survey covered in terms of demographic conditions, local economy such as employment and livelihood, land use, educational, health care facilities, public facilities, religious festivals/buildings etc., cultural, historical heritage and religious sites. Requirement of resettlement and rehabilitation aspects were also verified.

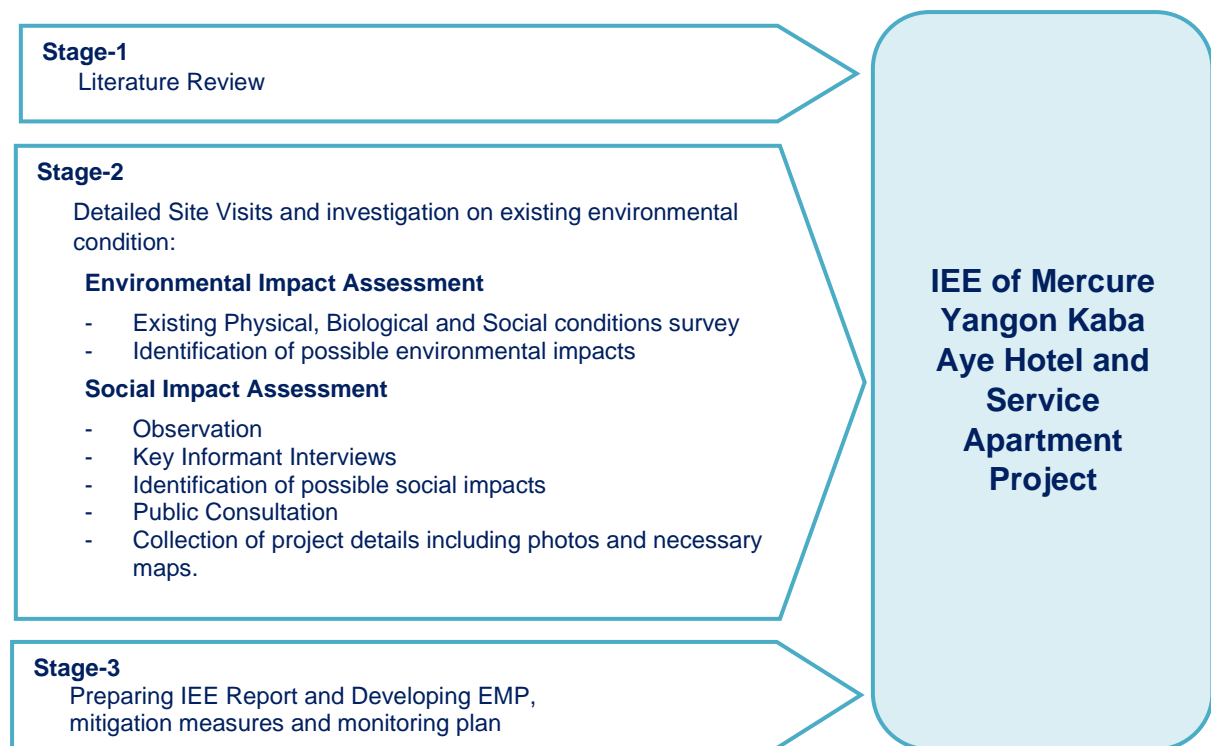


Figure 3.3 Procedures for conducting IEE

Perception and concerns in the community were recorded from key informant interviews and discussions. The public consultation was supposed to conduct to find out the project affected peoples' opinions and concerns on the development of project. Their concerns were taken into account for preparing the Environmental Management Plan. The general public can often delineate important environmental resources and values for the particular areas, and public participation is associated with all the stages for major undertakings in IEE process. However, due to global pandemic COVID-19 public consultation event was postponed.

The possible impacts due to the project activities were identified and evaluated against physical environmental and social environment. Regarding the anticipated negative impacts, the necessary steps were taken to examine the possible mitigation measures to avoid, minimize, eliminate and reduce the impacts as much as possible.

The Environmental Management Plan (EMP) was prepared for effectively implementing the mitigation measures which are feasible enough with considering available appropriate technology and budget. The environmental management and monitoring plan were developed for items, location, frequency, and method, responsible and implementing organization.

The IEE report was prepared through identification of possible impacts due to the project, inclusion of mitigation measures against anticipated negative impacts, preparation of environmental management (EMP) and monitoring plan and with findings from stakeholder meetings.

The outline of IEE report includes, but not limited to, the following topics:

Acronyms and terms,

Maps, tables and figures

Executive summary

Project description and alternative

Identification of the project proponent

Identification of IEE experts

Policy, legal and institutional framework

Description of the surrounding environment and social conditions

Potential environmental impacts

Mitigation measures and monitoring

Public consultation

Environmental management and monitoring plan

Environmental management and estimated budget

Conclusion and recommendations

References

Appendix



SECTION 4. DESCRIPTION OF APPLICABLE LAWS

4.1 Introduction

This session focuses on the existing legal and institutional framework for hotel project like Mercure Yangon Kaba Aye Hotel and Service Apartment project. Mainly this session focuses on the enacted laws, rules, regulations and guidelines the investors commits to comply and follow with in making investments in Myanmar.

4.2 National Administrative Framework

There are twenty-four union ministries in the Government of Union of Myanmar. Of these ministries, the major agency that is fully responsible to administer and provide necessary guidance regarding the EIA work is the Environmental Conservation department of the Ministry of Natural Resources and Environmental Conservation (MONREC), which is formerly known as the Ministry of Environmental Conservation and Forestry (MOECF).

4.3 The Constitution of the Republic of the Union of Myanmar (2008)

The New Constitution in Myanmar came into effect in 2008 and it includes the session to consider the national legislation and international agreements which assist Myanmar citizens in:

Preservation and safeguarding of cultural heritage

Environmental conservation;

Striving for development of human resources; and

Protection and preservation of public property.

4.4 National Sustainable Development Strategy

The National Sustainable Development Strategy (NSDS) is part of a broader programme of the UN Sustainable Development Commission set up after the World Summit on Sustainable Development in 2002. Every country, including Myanmar, that signed Agenda 21 at the Earth Summit in Rio de Janeiro in 1992, agreed to develop an NSDS by 2010 in line with the Millennium Development Goals (MDGs). United Nations Environment Programme (UNEP) provided funding for Myanmar to develop an NSDS. The main aim of the process was to develop an NSDS in line with international standards by meeting the MDGs and ensure that environmental and social impacts are mitigated when implementing development projects. Myanmar's NSDS was published in August 2009.

The three goals described in Myanmar's NSDS are sustainable management of natural resources, integrated economic development and sustainable social development. Specific strategies are outlined under each goal. For example, the goal for Sustainable Management of Natural Resources suggests strategies for forest resource management, sustainable energy production and consumption, biodiversity conservation, sustainable freshwater resources management, sustainable management of land resources, sustainable management for mineral resources utilization, and so on.

4.5 Myanmar National Environment Policy (1994)

With purposes to establish sound environmental policies, utilization of water, land, forests, mineral, marine and other mineral resources to conserve the environment and prevent environmental degradation, the National Commission for Environmental Affairs (NCEA) draft the National Environmental Policy in 1994. To meet with emerging challenges a new multifaceted national environmental policy, based on this National Environmental Policy, has finalized the final stage of drafting national environment policy by the Ministry of Natural Resources and Environmental Conservation (MONREC). This new national environmental policy is intended to

“complement the national economic policy”.² The policy objectives also include “achieving harmony and balance between its people, their cultural heritage, the environment and its national resource”.³ Principally, this policy states that it is the obligation of the government to take “environmental considerations into account when developing anything that may enhance the quality of the life of all its citizens” and environmental protection should always be “primary objectives in seeking development”.⁴ In addition, the policy also emphasizes “not to exceed its jurisdiction or infringe upon the interests of the other nation”⁵ while it has the sovereignty right to utilize its natural resource.

4.6 National Land Use Policy

The National Land use policy was drafted under the guideline of the former president U Thein Sein’s administration in 2014. This National Land Use Policy is the guide for the emergence of a new land law, including “harmonization of existing laws relating to land and their implementation” in Myanmar.

Some of the core objectives of this policy include:

- To promote sustainable land use management and protection of cultural heritage areas, environment, and natural resources for the interest of all people in the country
- To recognize and protect customary land tenure rights and procedure of the ethnic nationalities
- To develop transparent, fair, affordable and independent dispute resolution mechanisms in accordance with rule of law

In addition to these objectives, one of the basic principles of the National Land Use Policy is (a) *“to legally recognize and protect legitimate land tenure rights of people, as recognized by the local community, with particular attention to vulnerable groups such as smallholder farmers, the poor, ethnic nationalities and women”*⁶.

4.7 The Myanmar Hotel and Tourism Law (1993)

This law promotes the development of hotels and tourism industry. The objectives of this Law are as follows:

- to cause a systematic development of the hotel and tourism industry;
- to enable tourists to observe Myanmar cultural heritage and natural scenic beauty;
- to prevent destruction and damage of cultural heritage and natural scenic beauty, due to the hotel and tourism industry;

² “A new and comprehensive national environmental policy for Myanmar”, UNDP (2016), <http://www.mm.undp.org/content/myanmar/en/home/presscenter/pressreleases/2016/12/a-new-and-comprehensive-national-environmental-policy-for-myanmar.html>

³ Myanmar Laws & Regulations” Forest Legality Initiative, <http://www.forestlegality.org/risk-tool/country/myanmar>

⁴ Myanmar Laws & Regulations” Forest Legality Initiative, <http://www.forestlegality.org/risk-tool/country/myanmar>

⁵ Myanmar Laws & Regulations” Forest Legality Initiative, <http://www.forestlegality.org/risk-tool/country/myanmar>

⁶ Chapter (3) (a), Basic principles, the National Land Use Policy

- to contribute to international friendship and understanding through the hotel and tourism industry;
- to develop technical knowledge relating to hotel and tourism industry and to open up more employment opportunities and
- to provide security and satisfaction of tourists.

4.8 Myanmar Investment Law (2016)

The 2016 Myanmar Investment Law considerably simplifies the process for investment applications and offers a number of tax breaks, incentives, guarantees, rights and protection for business ventures. The Myanmar Investment Commission (MIC) is a government appointed body formed under the Myanmar Investment Law.

The Investment Law includes provisions to restrict or prohibit investment activities which affect public health, the environment and ecology systems, which produce toxic waste or which engage with toxic chemicals. The Law also states the duties of investors to conduct business in such a way as to avoid environmental damage, air and water pollution, in accordance with existing laws.

The Law also gives the investor the right to obtain a long-term lease of land or building from private or government sources.

The Law stipulates that the investor ensures that workers receive their entitlements and rights under relevant labour laws and rules.

4.9 Environmental Conservation Law (2012)

The Environmental Conservation Law (Pyidaungsu Hluttaw Law No. 9 of 2012) the following key objectives:

- To enable to implement the Myanmar National Environmental Policy;
- To enable to lay down the basic principles and give guidance for systematic integration of the matters of environmental conservation in the sustainable development process;
- To enable to emerge a healthy and clean environment and to enable to conserve natural and cultural heritage for the benefit of present and future generations;
- To reclaim ecosystems as may be possible which are starting to degenerate and disappear;
- To enable to manage and implement for decrease and loss of natural resources and for enabling the sustainable use beneficially;
- To enable to implement for promoting public awareness and cooperation in educational programmes for dissemination of environmental perception;
- To enable to promote international, regional and bilateral cooperation in the matters of environmental conservation;
- To enable to cooperate with government departments, government organizations, international organizations, non-government organizations and individuals in matters of environmental conservation.

4.10 Environmental Conservation Rules (2014)

Subsequently, the Environmental Conservation Rules (ECRs) were issued in June 2014 as the detailed enforcement regulations for the Environmental Conservation Law (2012). The Environmental Conservation Law stipulates the Ministry of Natural Resources and Environmental Conservation's responsibility for environmental policy and administration, formulation of environmental management plan, implementation of environmental monitoring, setting of environmental standards, management of hazardous waste, and formulation and implementation

of EIA, among others. The Environmental Conservation Law (ECL 2012) and Rules (ECL Rules 2014) both have implications for domestic and foreign investors in Myanmar. Article 7 of the Environmental Conservation Law prescribes the duties and powers of the erstwhile Ministry of Environmental Conservation and Forestry (MOECF), which include:

- Prescribing environmental quality standards on emissions, effluents, solid waste, production procedures, processes and products;
- Facilitating the settlement of environmental disputes;
- Specifying categories and classes of hazardous wastes generated from the production and use of chemicals or other hazardous substances used in industry, agriculture, mineral production, sanitation and other activities;
- Prescribing categories of hazardous substances that may significantly affect the environment;
- Prescribing the terms and conditions for effluent treatment in industrial estates, buildings, and other sites and emissions of machines, vehicles and mechanisms;
- Developing and implementing a system of environmental impact assessment (EIA) and social impact assessment (SIA);
- Causing polluters to pay compensation for environmental impacts; causing organizations which benefit from natural ecosystems to contribute funds and causing businesses which explore, trade and use natural resources to contribute a part of the benefit for supporting environmental conservation works.

4.11 Environmental Impact Assessment Procedure (2015)

Environmental impact assessment procedures have been prepared by the Ministry of Natural Resources and Environmental Conservation under the Environmental Conservation Law (2012). It requires that the Project Proponent shall include in its evaluation environmental, social and health aspects of the environment, and shall identify and assess all adverse impacts and risks for environmental, social issues and, if relevant, health issues that potentially could arise from the Project. Therefore, this Law can be effectively considered an EIA procedural framework.

4.12 National Environmental Quality (Emission) Guidelines (2015)

The Ministry of Natural Resources and Environmental Conservation has established environmental quality standards, namely, the National Environmental Quality Standard (2012) and the National Environmental Quality (Emission) Guidelines (2015). The National Environmental Quality (Emission) Guidelines (2015) have been primarily excerpted from the International Finance Corporation (IFC) Environmental Health and Safety (EHS) Guidelines, which provide technical guidance on good international industry pollution prevention practice for application in developing countries. The Guidelines are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of these Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them.

The National Environmental Quality (Emission) Guideline (2015) (hereafter referred to as 'Guidelines') states that:

- These Guidelines provide the basis for regulation and control of noise and vibration, air emissions, and liquid discharges from various sources in order to prevent pollution for purposes of protection of human and ecosystem health.
- These Guidelines refer to emission sources, and are intended to prevent or minimize adverse impacts to environmental quality or human health by ensuring that pollutant concentrations do not reach or exceed ambient guidelines or standards; the Guidelines apply to projects that generate noise or air emissions, and/or that have direct or indirect

discharge of process water, waste water from utility operations or storm water to the environment.

- Emissions Guidelines shall apply to any project subject to EIA Procedure.
- Provisions of the general and applicable industry-specific Guidelines shall be reflected in project environmental management plan (EMP) and environmental compliance certificate (ECC) and together constitute a project's commitment to take necessary measures to avoid, minimize and control adverse impacts to human health and safety, and the environment through reducing the total amount of emissions generation, to adopting process modification, including waste minimization to lower the load of pollutants requiring treatment, and as necessary, to apply treatment techniques to further reduce the load of contaminants prior to release of discharge.
- As specified in the EIA Procedure, all projects are obliged to use, comply with and refer to applicable national guidelines or standards or international standards adopted by the Ministry of Natural Resources and Environmental Conservation. These Guidelines shall henceforth be applied by the Ministry in satisfying this requirement until otherwise modified or succeeded by other guidelines or standards.
- As specified in the EIA Procedure, following receipt of project approval, a project shall commence implementation strictly in accordance with the project EMP and any additional requirements set out in the project Environmental Compliance Certificate (ECC), which will encompass conditions relating to emissions.
- As specified in the EIA Procedure, projects shall engage in continuous, proactive and comprehensive self-monitoring of the project and comply with applicable guidelines and standards.
- Air emissions, noise, odor, and liquid/effluent discharges will be sampled and measured at points of compliance as specified in the project EMP and ECC.

The National Environmental Quality (Emission) Guidelines were established on 29 December 2015. They consist of General & Industry-specific Guidelines. General Guidelines would apply to the proposed Project. Applicable General Guidelines are presented below:

Table 4.1 Air emissions guidelines

Parameter	Averaging Period	Guideline Value ($\mu\text{g}/\text{m}^3$)
Nitrogen dioxide	1-year 1-hour	40 200
Ozone	8-hour daily maximum	100
Particulate matter $\text{PM}_{10}^{\text{a}}$	1-year 24-hour	20 50
Particulate matter $\text{PM}_{2.5}^{\text{b}}$	1-year 24-hour	10 25
Sulfur dioxide	24-hour 10-minute	20 500

^a Particulate matter 10 micrometers or less in diameter

^b Particulate matter 2.5 micrometers or less in diameter

Table 4.2: Wastewater, storm water runoff, effluent and sanitary discharges guidelines (general application)

Parameter	Unit	Guideline Value
5-day Biochemical oxygen demand	mg/l	50
Ammonia	mg/l	10

Arsenic	mg/l	0.1
Cadmium	mg/l	0.1
Chemical oxygen demand	mg/l	250
Chlorine (total residual)	mg/l	0.2
Chromium (hexavalent)	mg/l	0.1
Chromium (total)	mg/l	0.5
Copper	mg/l	0.5
Cyanide (free)	mg/l	0.1
Cyanide (total)	mg/l	1
Fluoride	mg/l	20
Heavy metals (total)	mg/l	10
Iron	mg/l	3.5
Lead	mg/l	0.1
Mercury	mg/l	0.01
Nickel	mg/l	0.5
Oil and grease	mg/l	10
pH	S.U. ^a	6-9
Phenols	mg/l	0.5
Selenium	mg/l	0.1
Silver	mg/l	0.5
Sulphide	mg/l	1
Temperature increase	°C	<3 ^b
Total coliform bacteria	100 ml	400
Total phosphorus	mg/l	2
Total suspended solids	mg/l	50
Zinc	mg/l	2

^a Standard unit

^b At the edge of a scientifically established mixing zone which takes into account ambient water quality, receiving water use, potential receptors and assimilative capacity; when the zone is not defined, use 100 meters from the point of discharge.

Table 4. 3: Noise Levels Guidelines

Receptor	One Hour LAeq (dBA) ^a	
	Daytime 07:00 - 22:00 (10:00 - 22:00 for Public Holidays)	Nighttime 22:00 - 07:00 (22:00 - 10:00 for Public Holidays)
Residential, institutional, educational	55	45

Industrial, commercial	70	70
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^a Equivalent continuous sound level in decibels

4.13 Project-Relevant Laws

The Myanmar Environmental Conservation Law, Environmental Conservation Rules and the Environmental Quality (Emission) Standards are the initial steps for addressing all the complex environmental and social management issues faced by Myanmar. There are a number of other laws which, either directly or indirectly, relate to environmental and social management of the Project. These laws and requirements issued by Myanmar government ministries applicable to the proposed Project are listed below.

1. Land Acquisition Act (1894)
2. Conservation of Water Resources and Rivers Law (2006)
3. The Underground Water Act (1930)
4. Prevention of Hazard from Chemical and Related Substances Law (2013)
5. Public Health Law (1972)
6. Prevention and Control of Communicable Diseases Law (2011)
7. Protection and Preservation of Cultural Heritage Regions Law (1998)
8. The Protection and Preservation of Antique Objective Law (2015)
9. The Protection and Preservation of Ancient Monuments Law (2015)
10. Employment and Skill Development Law (2013)
11. The Worker's Compensation Act (1923)
12. The Payment of Wages Act (1936)
13. The Minimum Wage Law (2013)
14. The Leave and Holidays Act (2014)
15. Labour Organization Act (2012)
16. Social Security Law (2012)
17. Labour Dispute Settlement Law (2012)
18. Export and Import Law (2012)
19. The Child Law (1993)
20. Myanmar Maternal and Child Welfare Association Law (2009)
21. Electricity Law (2014)
22. Electricity Rules (2016)
23. Myanmar Fire Brigade Law and Rules (2015)
24. CQHP guidelines
25. Myanmar National Building Code (2016)
26. Yangon City Development Law (2018) and By-laws and notifications of related working committees and departments of YCDC such as Building, Road and Bridge, Water Supply and Sanitation, and Environmental Protection and Cleansing
27. Building Rules (Notification 2/2014 of Yangon City Development Committee)

The pertinent details of the above laws are provided in the Table below.

Table 4.4 Details of other laws in Myanmar applicable to the Project

SN	Law	Provisions
1	Land Acquisition Act (1894)	This law serves as the fundamental law for land acquisition in Myanmar. It sets out the procedures of land acquisition and compensation. Further, the law has outlined relevant procedures such as notice periods, procedures for

		objections to acquisition, the method of valuation of land, process for taking possession of land, court process and appeals, procedure for the temporary occupation of land, and the acquisition of land for companies. The act requires that compensation at market value is provided to those from whom the land is acquired.
2	Conservation of Water Resources and Rivers Law (2006)	<p>This law is under the purview of the Ministry of Transport. This law focuses on transportation safety and its development. The main objectives of this law include:</p> <ul style="list-style-type: none"> - To conserve and protect water resources and rivers system for beneficial utilization by the public. - To ensure smooth and safety waterways navigation along rivers and creeks; - To contribute to the development of the economy of the State through improving water resources and river systems; and - To prevent environmental impact.
3	The Underground Water Act (1930)	<p>This Act provides measures for systematic and sustainable use of underground water and prohibitions on accessing and using underground water without a license</p> <p>Whereas it is expedient to conserve and protect underground sources of water supply in the Union of Burma; it is hereby enacted as follows:</p> <ul style="list-style-type: none"> - This Act extends to such areas as the President of the Union may, by notification,¹ direct and shall apply only to tubes exceeding a depth to be prescribed by the President of the Union; - Provided that the President of the Union may prescribe different depths for different local areas. <p>No person shall sink a tube for the purpose of obtaining underground water except under and in accordance with the terms of a licence granted by the water officer.</p> <p>Every person owning a tube which was in existence before the extension of this Act to the local area concerned shall apply to the water officer for a licence for the said tube, and such licence shall be granted free of charge.</p> <p>Every person obtaining or attempting to obtain underground water shall supply the water officer with such information as the President of the Union may by rule prescribe.</p>
4	Prevention of Hazard from Chemical and Related Substances Law (2013)	This law stipulates chemicals management in Myanmar. It stipulates that when chemical and related substances are to be transferred, stored, used or disposed, operating approval certificate should be obtained in accordance with the regulations based on the international treaties.
5	Public Health Law (1972)	<p>The law stipulates the following for the environment:</p> <ul style="list-style-type: none"> - Residential area has to be trash free and wastage has to be properly disposed. - Area of drinking water source has to be cleaned and monitor according to the international standards. - Residential area has to be free of odor, smoke, carbon dioxide, dust, noise and radioactive materials.

		<ul style="list-style-type: none"> - Public and government buildings for the municipal and health care are advised to be developed. <p>The law stipulates the following for Processed Food delivered to the public:</p> <ul style="list-style-type: none"> - Processed Food deliver to the public has to be clean and healthy. - Food production facilities are to be clean from fraudulent products, disease, dust and pests.
6	Prevention and Control of Communicable Diseases Law (2011)	This law describes functions and responsibilities of health personnel and citizens in relation to prevention and control of communicable diseases. It also describes measures to be taken in relation to environmental sanitation, reporting and control of outbreaks of epidemics and penalties for those failing to comply. The law also authorizes the Ministry of Health and Sport to issue rules and procedures when necessary with approval of the Union Government.
7	Protection and Preservation of Cultural Heritage Regions Law (1998)	<p>This law was promulgated with the following objectives:</p> <ul style="list-style-type: none"> - To implement the protection and preservation policy with respect to perpetuation of cultural heritage that has existed for many years; - To protect and preserve the cultural heritage regions and the cultural heritage therein so as not to deteriorate due to natural disaster or man-made destruction; - To uplift hereditary pride and to cause dynamism of patriotic spirit of citizens by protecting and preserving the cultural heritage regions; - To promote public awareness and will as to the high value of the protection and preservation of the cultural heritage regions; - To protect cultural heritage regions from destruction; - To carry out protection and preservation of the cultural heritage regions in conformity with the International Convention approved by the State.
8	The Protection and Preservation of Antique Objective Law (2015)	This law stipulates the project proponent shall inform the village tract or ward administrator if any antique object is found in the project area.
9	The Protection and Preservation of Ancient Monuments Law (2015)	<p>The law stipulates that, if a person finds a monument of over 100 years old and above or under the ground or above or under the water which has no owner or custodian and knows or it seems reasonable to assume that the said monument is an ancient monument, he shall promptly inform the relevant Ward or Village Tract Administrative Office.</p> <p>The Ward or Village Tract Administrator shall keep the said monument as may be necessary and shall forward the information to the relevant Township Administrative Office within 14 days. The Township Administrator shall promptly carry out the necessities and inform the concerned department within 7 days from the date on which the information is received.</p> <p>The concerned Department shall inspect whether it is a real ancient monument or not and keep or cause to protect as may be necessary.</p>

		<p>The project proponent has to obtain the prior permission of the Department of Archaeology, Ministry of Culture, if the project area is in the prescribed area of Ancient Monument.</p> <p>The project proponent has to obtain the prior permission, in writing, of the Department of Ancient Research and National Museum if the project proponent proposes to dispose of the chemical and solid waste in the Ancient Monument area.</p>
10	Employment and Skill Development Law (2013)	The purpose of this law is to ensure job security and to develop the skills of employees in programs paid for by the project owner.
11	The Worker's Compensation Act (1923)	This Act stipulates that the employer is required to make payments to employees who become injured or who die in any accidents arising during and in consequence of their employment. Such compensation also must be made for diseases which arise as a direct consequence of employment, such as carpal tunnel syndrome.
12	The Payment of Wages Law (2016)	<p>The project proponent has to pay the wages in accordance with section 3 and 4 of said law.</p> <p>The project proponent has to submit with the agreements of employees and reasonable ground to the concerned Department if it is difficult to pay because of force majeure including natural disasters.</p> <p>The project proponent has to abide by the provisions of section 7 to 13 in chapter (3) in respect of deduction from wages.</p> <p>The project proponent has to pay the overtime fees, prescribed by law, to the employees who work over working hours.</p>
13	The Minimum Wages Law (2013)	<p>The purpose of this law is to ensure the owner pay his employees the wages not less than the prescribed. The prescribed wages must be put up in the work place to bring them to the notice of the workers.</p> <p>The law provides a framework for minimum wage determination: the presidential office establishing a tripartite minimum wage committee which shall decide the minimum wages with industrial variation based on a survey on living costs of workers possibly every two years. This also stipulates equal payment.</p>
14	The Leave and Holidays Act (2014)	This act has been used as the basic framework for leaves and holidays for workers. This Act defines the public holidays that every employee shall be granted with full payment. It also defines the rules of leaves for workers including medical leave, earned leave and maternity leave.
15	Labour Organization Law (2012)	<p>This law sought to protect the rights of the workers, to have good relations among the workers, or between the employer and the worker, and to enable to form and carry out the labour organizations systematically and independently.</p> <p>Every worker, who has attained the age prescribed in respective existing law to work in any trade or activity shall have the right to:</p> <p>(a) join as a member in a labour organization and to resign from a labour organization according to their own desire;</p>

		<p>(b) join as a member only in a labour organization formed according to the category of trade or activity relating to them.</p> <p>The employer shall recognize the labour organizations of his trade as the organizations representing the workers.</p> <p>The employer shall allow the worker who is assigned any duty on the recommendation of the relevant executive committee to perform such duty not exceeding two days per month unless they have agreed otherwise. Such period shall be deemed as if he is performing the original duty of his work. The employer shall assist as much as possible if the labour organizations request for help for the interest of his workers. However, the employer shall not exercise any acts designed to promote the establishment or functioning of labour organizations under his domination or control by financial or other means. No person shall coerce, threaten, use undue influence or seduce by illegal means any worker to participate or not to participate in a labour organization.</p>
16	Social Security Law (2012)	The Social Security Law of 2012 amended the Social Security Act of 1954. It stipulates the formation and implementation of social security schemes.
17	Labour Dispute Settlement Law (2012)	This law was enacted for safeguarding the rights of workers, good relationship between employers and workers and making a peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute between employer and worker justly. It stipulates that employer in which more than 30 workers are employed shall form the workplace coordinating committee consisting of the representatives of the workers and the representatives of the employer.
18	Export and Import Law (2012)	This law replaces the Control of Imports and Exports Act of 1947. It aims to implement the economic principles of the State successfully, to lay down the policies to export and import that will support the development of the State and that will be in conformity with the international trade standards.
19	Myanmar Maternal and Child Welfare Association Law (1990)	The Law prescribes the elimination of child labor, protection of children and young persons.
20	The Child Law (1993)	<p>The aims of this Law are:</p> <ul style="list-style-type: none"> - To implement the rights of the child recognized in the United Nations Convention on the Rights of the Child; - To provide protection in order that children may enjoy fully their rights in accordance with law; - To carry out measures for the best interests of the child depending upon the financial resources of the State; - To enable custody and care of children in need of protection and care by the State or voluntary social workers or nongovernmental organizations; and <p>To enable a separate trial of a juvenile offence and carry out measures with the objective of reforming the character of the child who has committed an offence.</p>
21	Electricity Law (2014)	This law replaces the Electricity Law of 1984. This a comprehensive piece of legislation covering licensing, a new regulatory commission, standards, inspection, tariff,

		and restrictions. This law divides projects into 'small' (up to 10MW), 'medium' (between 10MW to 30MW) and 'large' (upwards of 30MW); the states and regions can issue permits for small and medium power plants. In case these plants are not connected to the national grid, the concerned Ministry is not the primary authority involved. The authorities have a legal right to use land for the purpose of power plants under the Electricity Law and have the right to expand and maintain their facilities. The law also provides that the authorities can build transmission lines in accordance with existing laws.
22	Electricity Rules (2016)	<p>The General Inspector from the Ministry shall need to carry out as follows in accordance with the sections 32 and 33 of the Electricity Law:</p> <ul style="list-style-type: none"> ✓ shall issue electrical safety certificates after having inspected permitted electricity generation, transmission and distribution ✓ shall issue electrical safety certificates after having inspected lifts and escalators, electric train, factories from special economic zones, small, medium and large factories, public buildings and so on ✓ issue quality certificates after having inspected electrical equipment/appliances pertaining to norms and standards ✓ issue quality certificates for electrical equipment/appliances manufactured from local and overseas which have been approved after being inspected in line with norms and standards set forth by the laboratory established under the section 34 of the Electricity law
23	Myanmar Fire Brigade Law and Rules (2015)	<p>The Department of Fire Service shall direct the relevant owner or manager to form the Reserve Fire Brigade at a factory, workshop, bus terminal, airport, port, hotel, motel, lodgings, condominium, market, department, organization and business exposed to fire hazard.</p> <p>The relevant Government department or organization shall, for the purpose of fire safety, obtain the recommendation of the Inspection on fire safety of Department of Fire Service before granting permission for construction three-storied and above buildings, condominium, market and complex building.</p> <p>The owner or manager of the factory, workshop, bus terminal, airport, port, hotel, motel, lodgings, condominium, market, department, organization and business exposed to fire hazard shall, in accordance with the directive of the Department of Fire Brigade:</p> <ul style="list-style-type: none"> a) Not fail to form the Reserve Fire Brigade; b) Not fail to provide fire safety equipment.
24	CQHP Guidelines	<p>Mechanical Guideline, ACMV Guideline, Electrical Guideline, Mechanical Ventilation System in Non-Air-Condition, Water Supply & Sanitation Guideline, Structure Guideline, Deep Excavation Guideline</p> <p>ACMV Guideline</p> <p>- Basic concepts and design considerations for car parks ventilation, basement level car park, smoke purging system, ductless jet fan systems, kitchen exhaust systems, exhaust duct structure, exhaust hoods, bathrooms, toilets and locker rooms, exit staircase, internal exit passage way, smoke-stop</p>

		<p>and firefighting lobbies, outdoor air intake, duct work design/fabrication and installation, fabrication and ducting material.</p> <p>Electrical Guideline</p> <p>Guideline 1) All designs on high-rise building by a foreign firm/company shall be duly endorsed/countersigned by a local professional engineer when submitting the project to CQHP</p> <p>Guideline 2) Site Inspection (Field Works)</p> <p>Guideline 3) General Requirements for Design</p> <p>Guideline 4) Testing of Electrical Installations</p> <p>Guideline 5) Checking of Design and Testing for General Works</p> <p>Guideline 6) Checking of Installation Design and Testing of Electric Elevators and Others</p> <p>Guideline 7) Checking and Testing of A.C. Electric Generator</p> <p>Guideline 8) Checking of External Electrical Installation Design and Testing</p> <p>Guideline 9) Electrical Lighting and Illumination</p> <p>Guideline 10) Checking and Testing of Temporary Electrical Installations at Construction Sites</p> <p>Guideline 11) Checking and Testing of Building Lightning Arrester Installations</p> <p>Guideline 12) Commissioning, Operation, Maintenance and Repairs of Completed Electrical Installation Works</p> <p>Water Supply and Sanitation Guideline</p> <p>All designs on high-rise building (HRB) undertaken by a foreign firm/company shall be duly endorsed/countersigned by a Professional Engineer (PE) (Water Supply and Sanitation) when submitting the project to CQHP.</p> <p>To qualify for evaluating and endorsing designs by a foreign firm/company on Water Supply and Sanitation system for a HRB, a PE (Water Supply and Sanitation) must be duly registered with CQHP for National Counterpart (NCP) and be of full validity as issued by Myanmar Engineer Council (MEC).</p> <p>Guideline 1) Site Inspection</p> <p>Guideline 2) Geotechnical Investigations related to Sanitary Works</p> <p>Guideline 3) Cold and Hot Water Supply</p> <p>Guideline 4) Sanitation</p> <p>Guideline 5) Garbage Collection and Disposal</p> <p>Guideline 6) Design Concepts and Calculations for Water Supply</p> <p>Guideline 7) Design Concepts and Calculations for Sanitation</p> <p>Guideline 8) Water, Sanitation and Plumbing-Related Drawings</p> <p>Guideline 9) Operation and Maintenance</p> <p>Structure Guideline</p>
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		<p>Guideline 1) Project Organization Chart and Minimum Qualification Requirements for various positions</p> <p>Guideline 2) Geotechnical Investigations</p> <p>Guideline 3) Structural Design</p> <p>Guideline 4) Submission Documents Checklist</p> <p>Architecture Guideline</p> <p>Architectural Design</p> <p>Preliminary Design (Schematic Design)</p> <p>Final Submission Design</p> <p>Deep Excavation Design</p> <p>Submission Requirements for Earth Retaining or Stabilizing Structures for High Rise Buildings with basement construction</p> <p>Geotechnical Design</p>
25	Myanmar National Building Code (2016)	This building code covers urban planning, environmental management, architecture and urban design, structural design, soils and foundations, building services (lighting, electrical and allied installations, installation of lifts and escalators, water supply, drainage and sanitation, fire), construction material, constructional practices and work safety).
26	<p>Yangon City Development Law (2018)</p> <p>By-laws and Notifications of related working committees and departments of YCDC</p>	<ul style="list-style-type: none"> ✓ Broad power is given to the committee to carry out several tasks and among them the followings are relevant with the proposed project: ✓ Inspection, approving and taking actions against construction works ✓ Designation of zones and restricted areas for construction works, and designation and proclaiming of building type, layout, building height and area, boundary ✓ Cooperation in natural disaster prevention programs and management of fire protection measures ✓ Declaring regulations for vehicles' movement and parking areas ✓ Digging tube wells and construction of water pipes, water storage ponds, and maintenance of these facilities and structures, and exploring water resources for adequate amount of water supply ✓ Construction and maintenance of wastewater disposal drainage ✓ Management of extraction of underground water, usage and distribution ✓ Protection and promotion of water, air and soil qualities by managing and controlling emissions and waste and wastewater disposal
27	Rules relating to Buildings and Structures (Notification 2/2014 of YCDC)	<p>The following clauses apply to the proposed project:</p> <ul style="list-style-type: none"> ✓ Anyone who wants to do construction work in the city boundary shall apply to the committee with specified condition ✓ The committee shall fix the construction completed period in the order for construction work permit depending on type of the building

		<ul style="list-style-type: none"> ✓ The committee shall cancel the order for construction work permit, if the work is not started within one year from the issued date of the work permit ✓ The committee shall direct the applicant to include car parking and other urban requirements in the construction ✓ The person who is granted to do the construction work shall hang the sign board at work site stating the name of the person granted, the name of the supervising engineer, the license number, period of work volume, period of permit ✓ The person who is granted to do the construction work shall construct according to the building design approved by the committee ✓ The person who is granted to do the construction work shall apply again to the committee with the required altered building design, if the building to be constructed is different from the committee approved building design ✓ The person who is granted to do the construction work shall apply to the committee to extend the life of the permit on submitting the sufficient sound reasons ✓ The granted person shall prepare in advance according to the committee's instruction in order not to affect the safety of health of the passers-by, neighboring residents and buildings, materials ✓ The person who is granted to construct the building shall be inspected by the committee's authorized building engineer whether the building foundation is pegged or not according to the permitted building design drawing, road boundary demarcation line is in line with the building drawing or not ✓ The person who is granted to construct the building shall construct the building according to the instruction of the committee in order that the building should be in compliance with the architect drawing and requirement or not to obstruct the vision of traffic and vehicle if constructed at junction of the road, central point area ✓ The person who is granted to construct the building shall follow the guidelines and regulations set by corresponding government departments related to some installations and other works like installation of electricity meter boxes, transformers, emergency exit, wastewater disposal, waste disposal, fire prevention system, road and bridges ✓ The building construction permit holder shall report the completion of the building to the committee by letter within 30 days from the date of completion work ✓ The building construction permit holder shall be inspected by the committee in connection with the completion of the building construction
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4.13.1 International Environmental Conventions and Agreements

Myanmar has become party to various international treaties and conventions related to the environment and the following may have relevancy for the Project.

International and Regional Agreements and Conventions

No.	Conventions	Year (Ratified/Acceded/Accepted)
Environment		
1	Plant Protection Agreement for the Southeast Asia and Pacific Region, Rome 1956	1959 (Ratified)
2	Vienna Convention for the Protection of the Ozone Layer, Vienna 1985	Accession 16 Sep 1998 (Vienna) and Accession 24 Nov 1993 (Montreal)
3	Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal 1987	1993 (Ratification)
4	London Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, London 1990	1993 (Ratification)
5	Copenhagen Amendment to Montreal Protocol on Substances that Deplete the Ozone Layer	Not available
6	United Nations Framework Convention on Climate Change (UNFCCC), New York 1992	1994 (Ratification)
7	Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972	Acceptance 29.4.1994
8	ASEAN Agreement on the Conservation of Nature and Natural Resources, Kuala Lumpur 1985	1997 (Signatory)
9	Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto 1997	2003 (Accession)
Social, Labour and Health		
10	Universal Declaration of Human Rights (UNDHR)	Signed
11	Convention on the Rights of the Child	1991 (Acceded)
12	Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)	1997 (Acceded)
13	Relevant ILO Conventions in force in Myanmar concerning <ul style="list-style-type: none"> - Hours of Work (Industry) - Weekly Rest (Industry) - Unemployment Convention, 1919 - Night Work of Young Persons (Industry) Convention, 1919 - Right of Association (Agriculture) Convention, 1921 - Weekly Rest (Industry) Convention, 1921 - Workmen's Compensation (Accidents) - Workmen's Compensation (Occupational Diseases) Convention, 1925 - Equality of Treatment (Accident Compensation) - Minimum Wage-Fixing Machinery Convention - Forced Labour Convention - Workmen's Compensation (Occupational Diseases) Revised, 1934 	

	<ul style="list-style-type: none"> - Holidays with Pay - Convention concerning Statistics of Wages and Hours of Work, 1938 - Freedom of Association and Protection of the Right to Organize - Worst Forms of Child Labour 	
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Source: Environmental Impact Assessment (EIA) for Myanmar Onshore Block MOGE-3 Exploration Drilling Campaign, PTTEP South Asia Limited, October 2018 and desk research

4.14 Environmental Policy of the Developer Company

The project developer makes environmental policy according to Planet 21 Sustainable Management Plan of Accor Group which is actively involved in conserving resources, reducing pollution, conserving biodiversity, ecosystems and landscapes.

- Project developer company will make analysis of environmental impact and measures to mitigate the environmental impact
- Project developer company will make the hotel will enable to protect the environment through the conservation of depleting resources and controlling the environment from pollution, reducing their carbon emissions

4.15 Social Policy of the Developer Company

The Developer Company will make the team of Mercure Yangon Kaba Aye Hotel and Service Apartment to involve in corporate social responsibility actions for supporting the local communities, employees, guests and other stakeholders according to Planet 21 Sustainable Management Plan of Accor Group.

The Developer Company will involve in activities like Clean Up, Can Collection etc, fair trade, support local entrepreneurs, and activities to respect local culture.

There will be a policy

- against commercial exploitation,
- equitable hiring,
- employee protection
- do not jeopardize the provision of basic services such as water, energy, or sanitation to neighbouring communities

4.16 The Developer Company's Occupational Health and Safety Guidelines and Standards

The project developer company place top priority on the health and safety of guest, staff and all the stakeholder. The developer company will formulate Occupational Health and Safety Guidelines and Standards in accordance with Occupational Health & Safety Law 2019 which will include:

- Ensuring usage of safety instruments and machinery are ensured with the respective PPE required for the tasks
- Arrangement of the trainings on health and safety are given to all staff and contractors
- Ensuring all initiatives for making the work environment safe and secure to all the members
- Arrange regular trainings and internal on Health and Safety

- Making scheduled audit to ensure a safe environment
- Ensuring all safe implementations are in place for the COVID precautions

4.17 Legal Commitments

The project developer makes the following legal commitments:

- The project developer will ensure women shall be entitled to the same rights and salaries as that received by men in respect of similar work.
- The project developer will ensure the project will be in line with preservation and safeguarding of cultural heritage, environmental conservation, striving for development of human resources and protection and preservation of public property.
- The project developer will pay the compensation set forth by the MONREC for the environmental impacts caused by his project activities.
- The proposed project will implement mitigation measures and management plans stated in the IEE report.
- The project developer is responsible for, and shall fully and effectively implement, all requirements set forth in the Environmental Compliance Certificate, applicable laws, rules, procedures and standards.
- The project developer will follow the National Environmental Quality (Emission) guidelines established by MONREC.
- The project developer will close and discontinue the project only after payment of compensation to employees in accordance with applicable laws for any breach of employment contracts, closure of investment, sale and transfer of investment, discontinuation of investment, or reduction of workforce.
- The project developer will pay wages and salaries to employees in accordance with applicable laws, rules, procedures directives and so forth during the period of suspension of project for a credible reason.
- The project developer will pay compensation and indemnification in accordance with applicable laws to the relevant employee or his successor for injury, disability, disease and death due to the work.
- The project developer will have the right to sue and to be sued in accordance with law.
- The project developer will ensure that all foreign employees apply for the proper work permit and visa through the relevant Ministry.
- The project developer will provide workers with sufficient number of personal protective clothing, materials and facilities prescribed and approved by the Department on free of charge basis and cause workers to wear them while working.
- The project developer will prescribe precautionary plans and plans for emergency.
- The project developer will make necessary arrangements for managers, workers and members of the occupational safety and health committee including (Employer) himself/herself to attend occupational safety and health training courses stipulated by the Ministry in accordance with their departments or types of work.
- The project developer will arrange to be complied with precautions when entering restricted hazardous workplaces.
- The project developer will lay down the fire safety plan, perform fire drilling and train workers to use fire extinguishers systematically.
- The project developer will recognize the labour organizations of his trade as the organizations representing the workers.

- The project developer will provide rights and benefits including but not limited to, leave, holidays, overtime pay, compensation and social security.
- The project developer will settle disputes, within the law, between workers, employers, consulting experts or any other personnel involved in the business operation.



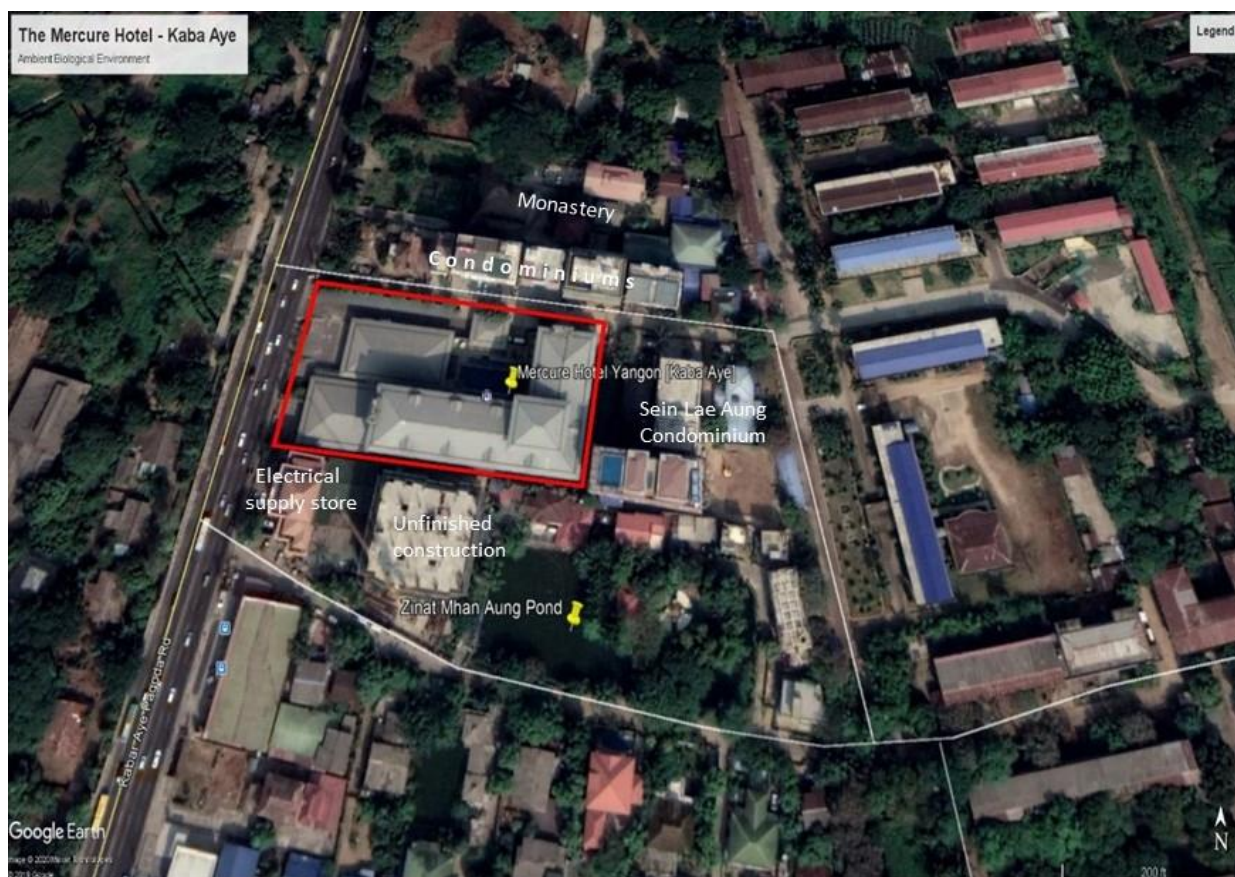
SECTION 5. DESCRIPTION OF THE SURROUNDING ENVIRONMENTAL AND SOCIAL CONDITIONS

5.1 Description of the Existing Surrounding Environment

Mercure Yangon Kaba Aye Hotel and Service Apartment is situated at the corner of Kabar Aye Pagoda Road and Sein Lè May Avenue Street. It can be entered from the Kabar Aye Pagoda Road which is west to the hotel. Sein Lè May Avenue Street is at the north of the hotel and on the other side of the street are condominiums namely, Green Inya Condominium, Green Hill Condominium, Sein Lè May Condominium, Green Paradise Condominium and SSS Auto Leasing Company. Back adjacent (east) to the hotel are Sein Lè Aung Condominium, and an Aesthetics and Wellness centre named Juvenus and further away are predominantly single-family houses. There is one unfinished high rise building at the south of the hotel and next to it is “Soe Aung and Brothers” electrical supply store.

From Mercure Yangon Kaba Aye Hotel and Service Apartment, Sein Lè May Avenue Street leads to Myanmar Oil and Gas Enterprise (MOGE) in 225 m, department offices of Ministry of Agriculture, Livestock and Irrigation (MOALI) in 180 m, and Department of Agricultural Land Management and Statistics and Department of Agricultural Mechanization.

City Point Mini Mart (Convenience Store), Dhamma Setkyar Monastery and Meditation Centre and Gangnam Buffet restaurant are nearest neighbours of Mercure Hotel. Inya Lake, Yangon Convention Centre (YCC), Myanmar International School Yangon (MISY), Myanmar Investment Commission (MIC), two hospitals and Central Shopping Centre, Myanmar Plaza Shopping Centre around 1 km away from Mercure Hotel.



The Mercure Hotel – Kaba Aye Boundary

Figure 5.1 Immediate neighbour of Mercure Yangon Kaba Aye

5.1.1 Hydrogeology

Yangon City is a place of abundant water resources and heavy rain. It lies at the confluence of Yangon River and Bago River and is surrounded by rivers. Its boundaries have been formed in a U-shape by Hlaing River and Yangon River, which joins Pan Hlaing River and Hlaing River to the west, Yangon River to the south, and Pazundaung Creek, which is known as Ngamoeyeik Creek at the upstream, to the east. All rivers and creeks adjacent to Yangon City have tidal and saline water intrusion effects within and beyond the limits of the city (Nakagami et al., 2009). In these rivers and creeks, freshwater with sediment concentrations of 1gram per litre (g/l), or less, flows unidirectional, seaward direction during the rainy season, however, saline water intrusion to the landward direction occurs during the dry seasons and low river flow period and salinities reach maximum 20‰ and sediment concentrations rise to 6 g/l (Nelson, 2001).

The proposed project site is located at Yankin Township and 37 feet above sea level. The land is surrounded by same level lands. Tidal water could not intrude and storm water and waste waters flows out to Inya Lake spillway creek which leads to Ngamoeyeik Creek. In rainy season sea level is higher and it intrudes till 22.5 feet above sea level but flood would not occur at site.



Figure 5.2 Yangon Hydrology Map

(source: <https://www.slideshare.net/aung3/7-assessment-of-groundwater-vulnerability-in-yangon-city-wint-wint-htun-2>)

5.1.2 Topography

The proposed Mercure Yangon Kaba Aye Hotel and Service Apartment project is located at Kabar Aye Pagoda road Yankin Township. Roadway to Inya Lake Hotel junction is situated at Northern 150 meter. The project is built on 1.944-acre land. The land is almost flat land and is about 37 feet above sea level. Neighbouring lands are also habituated that surrounding lands are flat and same to the project land.

5.2 Climate

Yangon has a tropical monsoon climate under the Koppen climate classification system. The city typically experiences a distinct rainy season from the month of May through to October when a substantial amount of precipitation occurs; and dry season which commences from November and ends in April. During the course of a year, average temperature is 27.3 °C/ 81.1 °F. The hottest days are between February and May, with little or no rain. At the end of this season, generally from March to April, the average monthly temperature reaches the upper 30°C. The average temperatures in Yangon range from 24°C to 36°C in April during the hot season and it ranges from 18°C to 32°C in January during the cooler season.

5.2.1 Rainfall and Relative Humidity

The month with the most precipitation is in July. The climate of Myanmar follows a typical monsoon pattern. Long-term average for monthly rainfall data, which are observed in different meteorological stations in Yangon Region such as Kabar Aye, Mingalardon, and Hmawbi. The rainfall data of Kabar Aye station is a little bit higher than the other two stations, Mingalardon and Hmawbi, but rainfall data of the latter two stations are nearly the same. Kabar Aye station is located in the city and the other two stations are located near the water supply reservoirs of Yangon City. Rain fall patterns range from 2014 to 2017, average months of rainfall per year is 17.42mm in 2014, 222.25mm in 2015, 217.08mm in 2016 and 271.83mm in 2017. Data are reported by Meteorology and Hydrology Department, Kabar Aye station, Yangon.

Table 5.1 Monthly total rainfall in 2014-2017

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	0	0	0	0	16	162	31	Trace	0	Trace	Trace	0
2015	0	0	9	40	185	580	692	408	329	355	69	0
2016	23	0	0	0	288	379	618	526	543	227	1	0
2017	1	0	0	81	449	650	802	382	401	371	125	Trace

“Trace” The amount of rainfall which cannot be measured. “1 mm=0.04 inch”

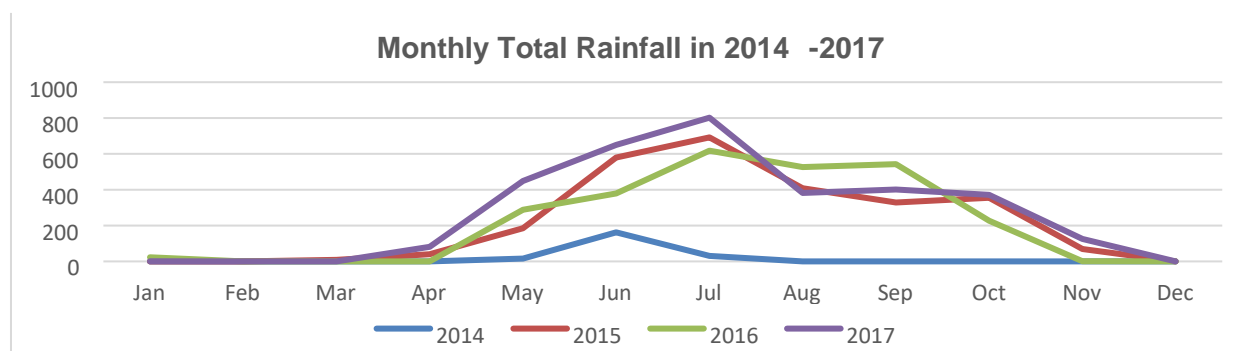


Figure 5.3 Line graph of monthly total rainfall in 2014 to 2017

5.2.2 Highest and Lowest Temperatures

In long-term analysis, the maximum mean daily temperature of Yangon Region is 38.0°C (in March, April 2014), 38.1°C (in April 2015), 38.5 °C (in April 2016), and 36.7 °C (in March 2017) and the minimum is 16.5°C (in January 2014), 18.8°C (in February 2015), 15.7°C (in January 2016), 18.1°C (in December 2017). Average yearly maximum temperature is 33°C and minimum temperature is 22.7°C in four years. The long-term monthly average of mean daily maximum and minimum temperatures of Yangon Region is shown in below table.

Table 5.2 Mean maximum temperature (°C) in 2014 - 2017

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	33.2	36.4	38.0	38.0	35.5	33.0	31.0	33.0	30.8	33.0	32.5	34.0
2015	32.7	35.0	37.8	38.1	35.9	32.3	31.7	31.2	32.2	32.4	34.1	33.3
2016	31.6	34.4	36.7	38.5	37.1	31.7	31.8	31.3	31.9	24.0	22.8	21.4
2017	33.0	34.8	36.7	36.1	35.0	31.4	30.1	30.7	32.2	31.9	33.1	32.0

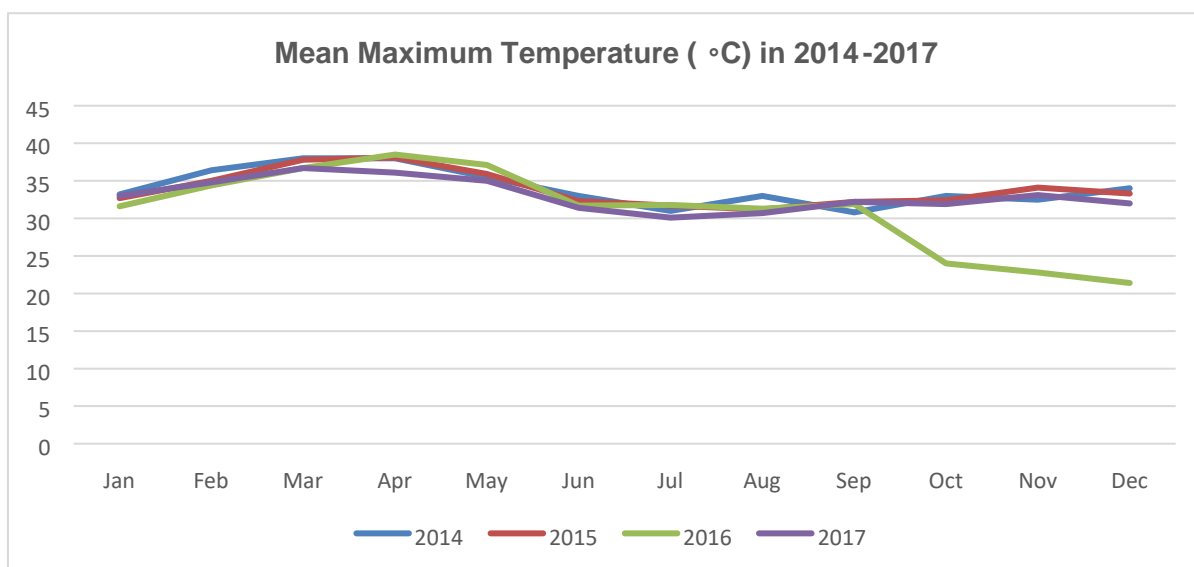


Figure 5.4: Line graph of monthly maximum temperature chart in 2014-2017

Table 5.3 Mean minimum temperature (°C) in 2014-2017

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	16.5	18.5	19.5	24.5	22.5	23.5	21.5	21.5	21.0	22.6	23.0	19.8
2015	18.9	18.8	21.8	23.9	24.9	24.5	24.4	24.3	23.9	23.5	22.0	19.3
2016	15.7	18.8	22.1	24.1	24.2	31.7	31.8	31.3	31.9	24	22.8	21.4
2017	19.9	19.6	21.6	24.3	25.2	23.9	23.2	23.0	23.0	22.2	21.7	18.1

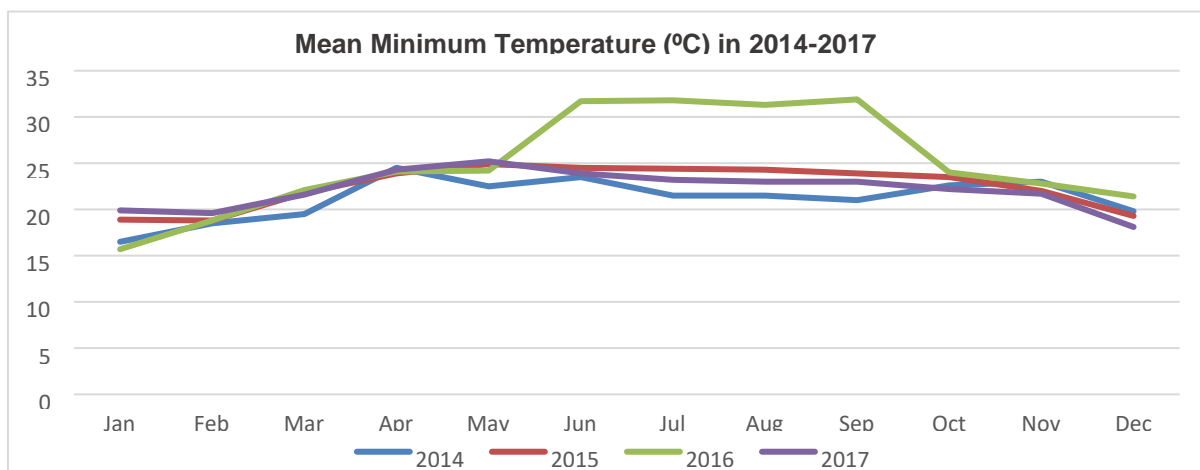


Figure 5.5: Line graph of minimum temperature (°C) in 2014-2017

5.2.3 Relative Humidity

The relative humidity was generally higher from May to October. The relative humidity plays an important role in the amount of evaporation and evapotranspiration. The mean monthly values of relative humidity are relatively similar throughout the year and relatively high during the summer period. The annual mean of daily relative humidity is on the range of 69-75% (2013-2017). The monthly mean values of relative humidity for the whole year are presented in Table 5.4.

Table 5.4 Monthly mean relative humidity (%) at (09:30) Hr in 2013 to 2017

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	71	70	68	67	78	89	89	90	89	81	75	74
2014	71	70	66	71	75	87	91	89	83	76	77	66
2015	65	66	64	64	73	84	88	89	87	84	76	72
2016	67	71	70	68	72	85	88	89	87	86	74	73
2017	67	65	64	67	78	85	93	89	86	86	76	68

Source: Meteorology and Hydrology Department

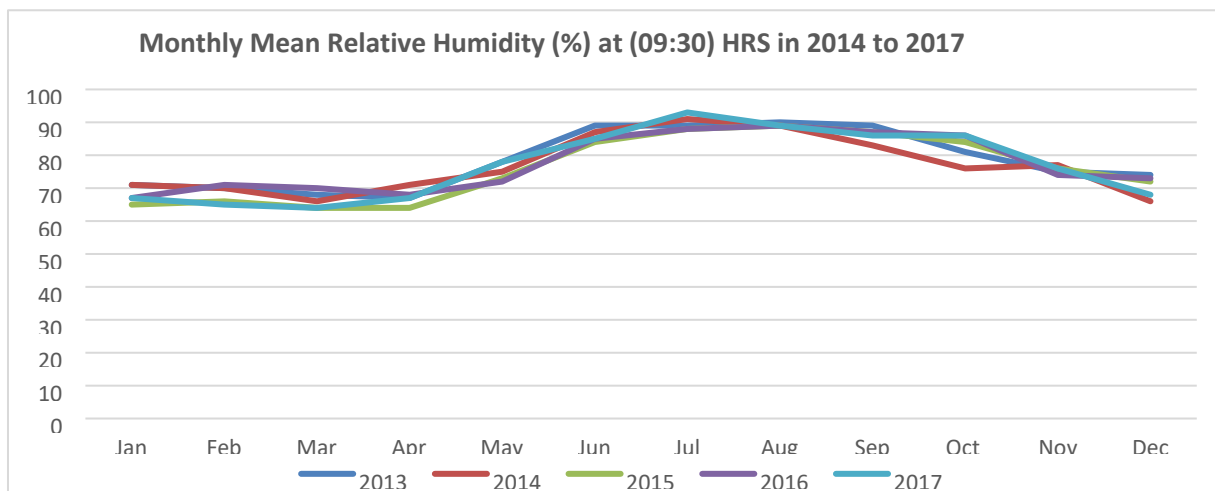


Figure 5.6 Line graph of monthly mean relative humidity (%) at (09:30) hr in 2014 to 2017

5.2.4 Wind Direction and Wind Speed

Data of wind direction and wind speed reported by Metrology and Hydrology Department, Kabar Aye Station are collected and shown as below:

Normal wind direction is from north-east, starts from October to February. South-east and southwest winds are from January to November throughout the year of 2013 to 2017. Notable highest and lowest wind speeds are 6.0 mph in 2015, 1.2 mph in 2014. Average wind speed 2.6 mph between 2013 and 2017. It was reported that the month with the highest wind speed is April.

Table 5.5 Monthly mean wind direction (mph) in 2014-2017

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	SE	NE	SE	SW	NW	N	SW	SE	SE	NE	SW	NE
2015	SE	NE	SE	SW	NW	N	SW	SE	SE	NE	SW	NE
2016	SE	SE	SE	SW	SW	SE	SE	SW	SW	SE	SE	NE
2017	NE	SE	SW	SW	SW	SW	SW	SW	SE	SE	NE	NE

Table 5.6 Monthly mean wind speed (mph) in 2014-2017

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014	2.4	1.2	2.4	1.2	2.4	1.2	1.2	2.4	2.4	2.4	1.2	1.2
2015	4.8	4.8	6.0	3.6	3.6	3.6	3.6	3.6	4.8	6.0	4.6	4.6
2016	2.7	2.1	1.6	2.1	2.3	2.1	2.1	2.4	2.4	2.3	2.7	2.3
2017	2.4	2.0	1.7	1.7	2.0	2.5	1.9	1.7	2.0	2.2	1.9	2.4

5.3 Natural Hazards

Myanmar is exposed to multiple natural hazards including cyclones, earthquakes, floods and fire. It has been periodically exposed by natural disasters.

Cyclones

Cyclones and associated storm surges from the Bay of Bengal. Annually, there are approximately 10 tropical storms in the Bay of Bengal from April to December. Severe cyclones usually occur during the pre-monsoon months of mid-April to mid-May and post-monsoon months of October to December.

The threat of flooding usually occurs in three waves each year: June, August and late September to October.

Earthquakes

The Yangon District is in the vicinity of the southern section of the Sagaing Fault which has not been active in the past 50 to 75 years indicating that the faults may be under accumulating stress increasing the potential for an earthquake to occur. The Sagaing Fault is the most prominent active fault in Myanmar trending roughly north to south. It has been the originator of a large proportion of destructive earthquakes in Myanmar.

The proposed site is located at approximately 37 km at the west of Sagaing fault which is 1,200 km long Sagaing fault line that stretches from the northern corner of the country to the Martaban Gulf. A 7.0 Richter Scale quake killed 500 people from Bago and 50 people from Yangon in 1930.

At that time, Yangon population was about 400,000. Summary record of earthquakes which struck Myanmar is listed in Table below.

Table 5.7 The record list of earthquakes in Myanmar

Date	Location	Magnitude and/or brief description
868	Bago	Shwemawdaw Pagoda a fell
875	Bago	Shwemawdaw Pagoda a fell
1429	Innwa	Fire-stopping enclosure walls fell
1467	Innwa	Pagodas, solid and hollow, and brick monasteries destroyed
24 July 1485	Sagaing	3 well-known pagodas fell
1501	Innwa	Pagodas, etc. fell
13 Sep 1534	Bago	Pagodas including Shwemawdaw and Mahazedi fell
1567	Bago	Kyaikko Pagoda fell
1582	Bago	Umbrella of Mahazedi Pagoda fell
9 Feb 1588	Bago	Pagodas, and other builds fell
30 Mar 1591	Bago	The Great Incumbent Buddha destroyed
23 June 1620	Innwa	Ground surface broken, river fishes were killed after quake
18 Aug 1637	Innwa	River water flush
10 Sep 1616	Innwa	-
11 June 1648	Innwa	-
1 Sep 1660	Innwa	-
3 April 1690	Innwa	-
15 Sep 1696	Innwa	4 well-known pagodas destroyed
8 Aug 1714	Innwa	Pagodas etc. fell; the water from the river gushed into the city
4 June 1757	Bago	Shwemawdaw Pagoda damaged
2 April 1762	Sittwe	M=7 RS: very destructive violent earthquake felt over Bengal, Rakhine up to Calcutta
27 Dec 1968	Bago	Pon nya yadana Pagoda fell
9 June 1776	Innwa	A well-known pagoda fell
26 April 1850	Innwa	-
21 Mar 1839	Innwa	Oil place and many buildings demolished;
23 Mar 1839	Innwa	Pagodas and city walls fell; ground surface broken; the river's flow reversed for sometime; Mingun Pagoda shattered; about 300 to 400 persons killed
6 Feb 1843	Kyaukphyu	Eruption of mud volcanoes at the Ram bye (Ramree) Island
3 Jan 1848	Kyaukphyu	The civil line and other buildings were damaged
24 Aug 1858	Pyay	Collapsed houses and tops of pagodas at Pyay, Henzada, and Thayet Myo and felt with some damages in Innwa, Sittwe, Kyaukphyu and Yangon

8 Oct 1888	Bago	Mahazedi Pagoda collapsed
6 Mar 1913	Bago	Shwemawdaw Pagoda lost its final
5 July 1917	Bago	Shwemawdaw Pagoda fell
10 Sep 1927	Yangon	-
17 Dec 1927	Yangon	M-7 RS: extended to Dedaye
8 Aug 1929	Near Taungoo	Bent railroad tracks, bridges and culver is collapsed, and loaded trucks overturned (Swa Earthquake)
5 May 1930	Near Khayan	M-7.3 RS. 1mix-IX; in a zone tending north-south for 37km south of Bago (on the Sagaing Fault line) about 500 persons in Bago and about 50 persons in Yangon killed
3 Dec 1930	Nyaunglebin	M-7.3 RS: railroad tracks twisted (Pyu Earthquake): about 30 persons killed
27 Jan 1931	East of Indawgyi	M-7.6 RS: 1 mix-IX: numerous fissures and cracks (Myitkyina Earthquake)
10 Aug 1931	Pyinmana	-
27 Mar 1931	Yangon	-
16 May 1931	Yangon	-
21 May 1931	Yangon	-
12 Sep 1946	Tagaung	M-7.5 RS
12 Sep 1946	Tagaung	M-7.75 RS
16 July 1956	Sagaing	M-7.0 RS: Several pagodas severely damaged (40to50 persons killed)
8 July 1976	Bagan	M-6.8 RS: Several pagodas in Bagan Ancient City were severely damaged (only 1 person killed)
22 Sep 2003	Taundwingyi	M-6.8 RS: Severe damaged to rural houses and religious buildings (7 persons killed)
24 Mar 2011	Tarlay	Mw 6.8, Myanmar, Thailand, Laos, China and Vietnam border areas were affected and about 150 person were killed when 130 houses collapsed.
24 Aug 2016	Chauk	Mw 6.8, several temples in the nearby ancient city of Bagan were damaged and four people were reported dead

Source: Myanmar Geosciences Society

According to the seismic zone map of Myanmar (revised version, 2005), Yankin township falls under the category of seismic zone (II) - moderate zone and the probable range of ground acceleration is between 0.1 and 0.15 g (the acceleration due to Earth's gravity, equivalent to g-force). The equivalent modified Mercalli scale class is VII.

The Project Site is located in moderate earthquake zone and therefore the building construction design needs to cater for this hazard with adequate planning on emergency response procedures.

The following table is the summary of Modified Mercalli (MM) Scale and the level of probable damage and destruction.

Table 5.8 Summary of Modified Mercalli (MM) Scale and the level of probable damage and destruction

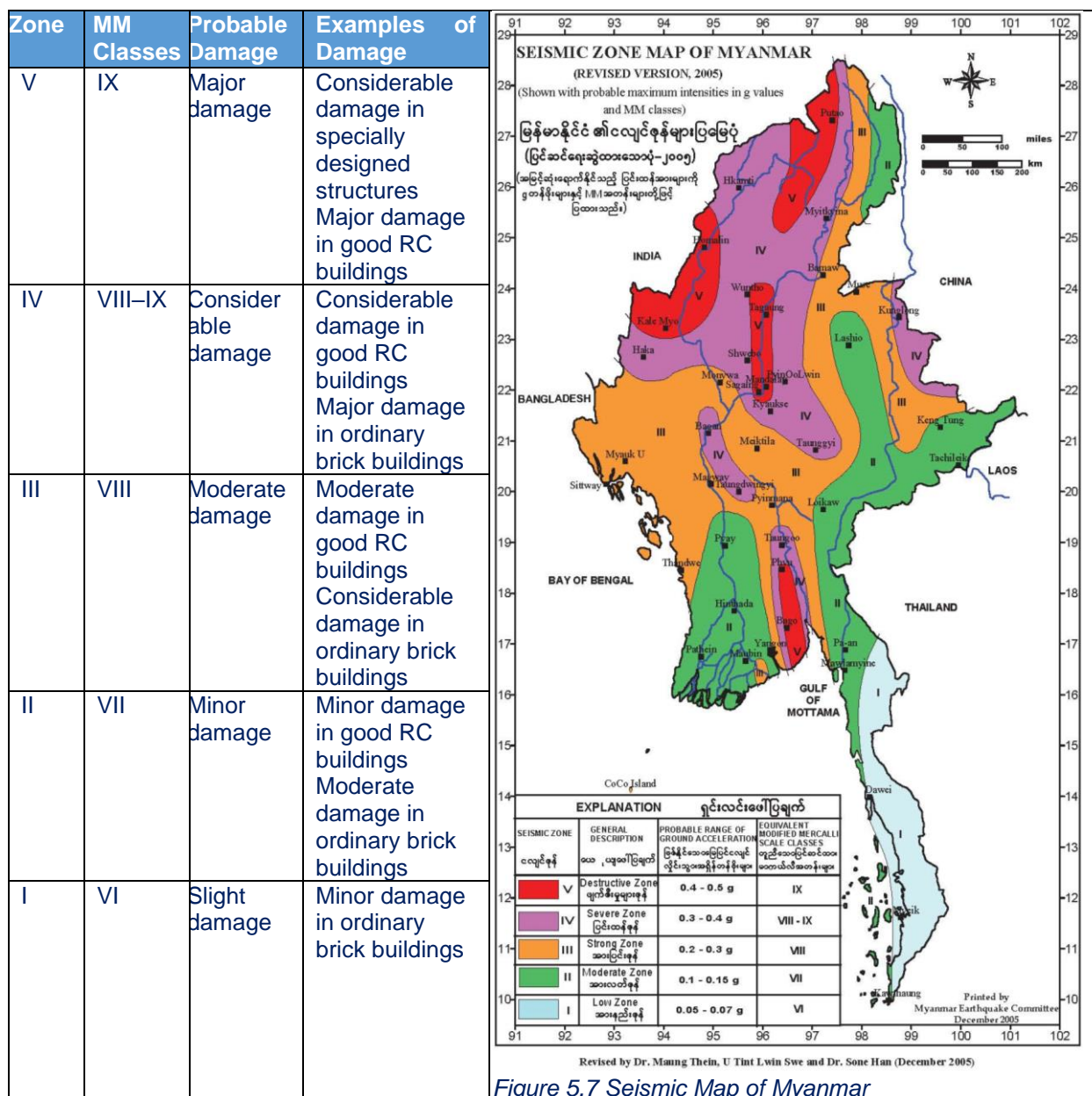


Figure 5.7 Seismic Map of Myanmar

Source: https://www.researchgate.net/publication/292845235_Seismic_Zone_Map_of_Myanmar

5.4 Physical Environment

5.4.1 Study Limit of the project

An area, covering a 3-km radial distance from the Project Site is considered as the study area for the purpose of the baseline studies. A study limit area is shown in google map.



Figure 5.8 Google Earth picture showing 3 km radial distance from the Project Site

5.4.2 Water Data Collection

5.4.2.1 Baseline Water Quality

The water quality analysis includes key physiochemical and biological contaminants and parameter that are crucial for public health and environmental concerns. Laboratory sampling for water were conducted for 3 sources (i.e. YCDC water, tube well water, and surface water). Out of these 3 major water sources, the Mercure Yangon Kaba Aye utilizes YCDC water supply as primary water source for hotel's functions, while tube well water has been destined for secondary sources as back up. Meanwhile, the surface water which is from the nearby pond is taken as baseline data for future reference and potential impact assessment. Though this water body do not have any relationship with hotel operation and maintenance in term of sourcing and location, the baseline water quality of the pond water may help in retrospective reference on condition when the environmental dispute related water pollution arisen within the pond itself. The result and discussion of sampling results is under. Samples were transported to ISO tech laboratory within 6 hours of collection for sampling. The methods applied in sampling to all prescribed parameters are by means of standard methods for water and wastewater examination (APHA, 2015). The full laboratory report is attached in the appendix 14.

The closest public amenity (water body) found neighbourhood of the hotel is a pond which is located 20m to the southern front of the hotel compound and from a space of private a villa away. The pond is located inside Zina Man Aung Pagoda territory. The size of the pond is about 2,500 sq m wide and with 3m maximum depth. As part of the baseline environmental data, the water quality of the pond water has been examined and the lab results is as showed in the appendix 14. Base on the site visit, it has been noticed that there are traces of surface eutrophication resulting water colour turns into green colour. Aquatic life is also observed. The location of the pond is shown in the following photo (Figure 5.7). Although, Inya Lake is also situated 500 m away from the hotel both of the water body are not likely to have environmental impacts by hotel operation.



Figure 5.9 Location of Nearest Water Body from the Hotel

5.4.2.2 YCDC Water

The water quality sampling had been conducted at ISO tech laboratory covering following mentioned key parameters. The results indicated that the YCDC water has no major metallic contamination. Because of the surface water source nature (Gyo Phyu Reservoir), it has been detected with some mineral solubility (i.e. hardness, alkalinity, chloride, and sulphate) but all of them are remain under permissible national environmental quality guideline limits. The physical properties of water quality such as conductivity, turbidity, and colour are also under allowable limit for drinking and personal hygiene purpose. However, trace of coliform was found present in the YCDC water source. Though coliform bacteria are not likely to cause illness, their presence in objectional for instant or direct consumption by human being. For the faecal coliform count was also not detected (0 CFU/100 ml), the YCDC water could be considered harmless. The existence of the total coliform could be traced back from background contamination from either man or animals in source reservoir. For the hotel employed series of filtration processes, the water quality inside the distribution system is deemed harmless for domestic application. Furthermore, the discovery of Nitrate (N-NO_3) in YCDC water is also originated from nitrogen fixation and denitrification of aquatic plant, zooplankton and Phytoplankton which can be observed in the source reservoir and along the conduit. Nevertheless, nitrogen concentration was found way below safety margin.

Table 5.9 Laboratory sampling results of YCDC water

Sr.	Parameter (s)	Units (s)	Results	NEQ Guideline Values
1	Lead (Pb)	mg/l	Nil	0.01
2	Arsenic (As)	mg/l	Nil	0.01
3	Nitrogen-Nitrate (N-NO ₃)	mg/l	0.3	50
4	Iron (Fe)	mg/l	0.22	0.3
5	Chloride (as CL ⁻)	mg/l	2	250
6	Sulphate (SO ₄)	mg/l	3	500
7	Total Dissolved Solids	mg/l	42	1000
8	Total Alkalinity	mg/l as CaCO ₃	46	200
9	Total Hardness	mg/l as CaCO ₃	32	500
10	Conductivity	µS/cm	84	800
11	Turbidity	NTU	3	5
12	Color	TCU	0	15
13	pH		7.2	6.5 - 8.5
14	Total Coliform Count	CFU/100 ml	2	Not Detected (<0)
15	Total Fecal Coliform Count	CFU/100 ml	0	Not Detected (<0)

5.4.2.3 Tube Well Water

Unlike YCDC water which is sourced from surface water body, in tube well water of the Mercure Yangon Kaba Aye Hotel and Service Apartment, nitrogen and coliform source are not necessary to be investigated since the depth of the tube well is more than 700 ft in which no botanical and biological life exist. Thus, nitrogen and coliform tracing is unnecessary. However, it has been examined that the iron concentration of the tube well is extremely high at 4.4 mg/l. Therefore, it is completely unsatisfactory for even domestic application without prior proper treatment applied to it. Because of the high iron concentration, upon taken oxidation by aeration process, the colour and turbidity escalated beyond guideline standards. Special precautions need to be considered for water treatment system and its appurtenances when tube well water are extracted and distributed for domestic application. The combination of iron presence and its high physical characteristic can impart the taste and smell of the tube well water by iron minerals.

In addition, because of the subsurface water characteristic, the hardness and alkalinity of tube well water found higher than surface water of YCDC but remains under permissible limits. Nevertheless, the toxic substances such as lead (Pb) and arsenic (As) were not detected in the tube well water. The concentration of dissolved solids, chloride (Cl⁻), and sulphate (SO₄) was also found negligible.

It is therefore water quality is routinely investigated to ensure it is satisfactory for users. Tap water represents the water distributed to all hotel facilities. It is treated in 3 steps pressurized micro-filtration system after directing both sources (YCDC and tube well). The main objective of testing to the tap water is to ensure the mineral concentration [especially high iron (Fe) level] is whether effectively managed.

Based on the sampling results are national health laboratory (see the appendix 14), the result revealed that all important physiochemical contaminants are well managed by the water treatment system installed in the system. The laboratory sampling for raw water (YCDC and tube well) and tap water is attached in the appendix 13.

Table 5.10 Laboratory sampling results of tube well water

Sr.	Parameter (s)	Units (s)	Results	NEQ Guideline Values
1	Lead (Pb)	mg/l	Nil	0.01
2	Arsenic (As)	mg/l	Nil	0.01
3	Iron (Fe)	mg/l	4.4	0.3
4	Chloride (as CL ⁻)	mg/l	7	250
5	Sulphate (SO ₄)	mg/l	38	500
6	Total Dissolved Solids	mg/l	92	1000
7	Total Alkalinity	mg/l as CaCO ₃	100	200
8	Total Hardness	mg/l as CaCO ₃	46	500
9	Conductivity	μS/cm	184	800
10	Turbidity	NTU	110	5
11	Colour	TCU	80	15
12	pH		6.8	6.5 - 8.5

5.4.2.4 Surface Water

The surface water represents pond water that is from the Zina Man Aung Pagoda compound. Because of the surface water nature organic and nitrogen sources was rather emphasized than mineral concentration. The laboratory results revealed that oxygen demand for both chemical and biological nutrient contamination of surface water were found pleasant to sustain for aquatic life and recreational purpose. The absence of phosphate nutrient also provided with the evidence that there is no pollution by fertilizer application. The presence of nitrogen source (both Nitrate and nitrogen) are as a result of active algal booming plus zooplankton and phytoplankton inside the pond micro ecosystem. The visual appearance of pale green colour also provides with the evidence that nitrogen assimilation and nitrification are occurring to certain extent with the pond ecosystem among plant life and organic deposits of tree leaves. With no phosphate pollution exists the pond, severe eutrophication is not likely to occur in the pond.

Another factor that need to be considered is the dissolved oxygen level. It has been inspected that the dissolved oxygen level was found at 6.8 mg/l. The dissolved oxygen level depends on the depth, temperature and ecological balance of host environment. But, at 3ft depth water level and ambient temperature in the afternoon (32 °C +/- 2°C), the dissolved oxygen level was found slightly below average margin (7.0 mg/l). In case this figure drops below 5.0 mg/l for prolong period, the pond environment could become hostile for aquatic life. Other mineralogical characteristics of pond water (i.e. alkalinity and hardness) were recorded as normal for surface water quality.

Table 5.11 Laboratory sampling results of surface water (pond water)

Sr.	Parameter (s)	Units (s)	Results	Surface Water Guideline Values
1	Chemical Oxygen Demand	mg/l	32	250
2	Biological Oxygen Demand	mg/l	6	50
3	Dissolved Oxygen	mg/l	6.8	< 7.0
4	Nitrogen-Nitrate (N-NO ₃)	mg/l	0.3	50
5	Nitrogen-Nitrite (N-NO ₂)	mg/l	0.1	1.0
6	Phosphate (PO ₄)	mg/l	Nil	500
7	Total Dissolved Solids	mg/l	68	1000
8	Total Alkalinity	mg/l as CaCO ₃	46	200
9	Total Hardness	mg/l as CaCO ₃	54	500
10	Conductivity	μS/cm	136	800

11	Turbidity	NTU	3	5
12	Color	TCU	Nil	15
13	pH		7.6	6.5 - 8.5
14	Total Coliform Count	CFU/100 ml	4	Not Detected (<0)
15	Total Fecal Coliform Count	CFU/100 ml	Nil	Not Detected (<0)

5.4.3 Baseline Effluent Wastewater Quality

The wastewater denoted in the invested represent the effluent water from the wastewater treatment plan. It is the sole water pollution point of hotel operation and maintenance since the combination of sanitary and domestic sewer are treated in sewer system (see wastewater treatment plant). Thus, important parameters relevant to effluent water was investigated in the laboratory. The sampling results of the effluent wastewater is shown in the table below. The results are compared against wastewater effluent standard endorsed by ECD guidelines.

Table 5.12 Results of the effluent wastewater with Guideline Values

Sr.	Parameter (s)	Units (s)	Results	Guideline Values for Wastewater Effluent
1	Nitrogen-Nitrate (N-NO ₃)	mg/l	1.8	50
2	Nitrogen-Nitrite (N-NO ₂)	mg/l	2.8	10 for total Nitrogen
3	Chemical Oxygen Demand	mg/l	64	250
4	Biological Oxygen Demand	mg/l	20	50
5	Dissolved Oxygen	mg/l	2.2	5.0
6	Total Dissolved Solids	mg/l	238	3500
7	Total Hardness	Mg/l as CaCO ₃	60	200
8	Conductivity	μS/cm	476	800
9	Turbidity	NTU	33	5
10	Color	TCU	10	15
11	pH		8.0	6.5 - 8.5
12	Phosphate	mg/l	2.2	2.0
13	Total Coliform Count	CFU/100 ml	100	400
14	Total Fecal Coliform Count	CFU/100 ml	30	Not specified

The results indicate that most important parameters for wastewater effluent (i.e. chemical and biological oxygen demand, total coliform) are under enforced limit. Therefore, it could be evaluated that the wastewater treatment plant installed for handling the sanitary and domestic sewer is fully operational and efficient.

However, the oxygen concentration was noticed at 2.2 mg/l, which is a critical level for aquatic life to sustain for growth and spawning. Nevertheless, the dissolved oxygen level could recover itself according to oxygen sag curve as increased in time and flow distance. Since the effluent wastewater is discharged into public drain, this oxygen deficiency is at the final outfall sewer point is inconsequential to the environment. The concentration of detectable nitrogen and phosphate level is likely to cause eutrophication to natural water body when accumulated from other discharged along public drains. Nonetheless, for individual effluent limitation, the concentration is still under permissible effluent guidelines. Source of nitrogen and phosphate are as the result for human excreta and organic food waste from the sewage. The wastewater quality could be enhanced either by ensuring prolonged oxidation and increased contact surface in the aeration tanks of the wastewater treatment plant. Likewise, the faecal coliform could also be suppressed by repetitive disinfection by chlorination.

5.4.4 Air Quality and Sound Level Analysis

Sources of Air Emissions Surrounding the Site

The major source of air pollution is the exhaust emission from the heavy vehicular traffic on Kabar Aye Road. The impacts from this source are expected to be captured in the levels of pollutants measured in the site-specific background air quality monitoring study conducted within the impact zone. Sampling period was based on 24-hour measurement level of Particulate Matter ($PM_{2.5}$, PM_{10}), Sulfur Dioxide (SO_2), Oxides of Nitrogen (NO_x), Ozone (O_3) and Carbon Monoxide (CO), Total Volatile Organic Compound (TVOCs), Hydrocarbon (HC), and Methane (CH_4) were measured by auto sensors of the EPAS haz-scanner to meet the requirements of the MONREC and compared with the standards stipulated by National Quality Emission Guideline (NEQG).

Baseline data sampling



Figure 5.10: Ambient air quality measurement location map and noise monitoring on the roof top of the residence (south of the project site)

Air quality analysis was conducted in 15 July 2019 at one site which will be affected within 3 km radius in the project site to identify the current condition to gauge the possible impact and prevent pollution that may occur.

Residence at (Latitude $16^{\circ}50'19''N$ and Longitude $96^{\circ}09'22''E$) south of the project on Kabar Aye Pagoda Road was chosen as the sample site to measure the ambient air quality and sound level. Efficiency of Ambient air quality testing machines can embrace 5 km radius circle.

5.4.4.1 Result of Ambient Air Quality Parameters

The existing concentration levels of air pollutants of concern, as mentioned above, are presented in Table 5.13. The observed values were compared with the standards as prescribed by NQEG for Industrial and Residential zones.

Table 5.13 Ambient air quality parameters and reference value

Sr. No	Name	NEQG standard	Unit	Residence
				15-7-2019
1	PM ₁₀ (24 hr)	50	µg/m ³	17.8
2	PM _{2.5} (24 hr)	25	µg/m ³	9.5
3	NO _x (1 hr)	200	µg/m ³	11.0
4	SO ₂ (24 hr)	20	µg/m ³	35.8
5	O ₃ (8 hr)	100	µg/m ³	13.5
6	CO (8 hr)	9000	ppb	148.7
7	TVOCs (1 hr)	44	ppb	0.4
8	HC	-	ppm	411.0
9	CH ₄	-	ppm	2723.0
10	Relative Humidity	-	%	48.0
11	Wind Direction	-	Degree	231.0
12	Wind Speed	-	Kph	1.4

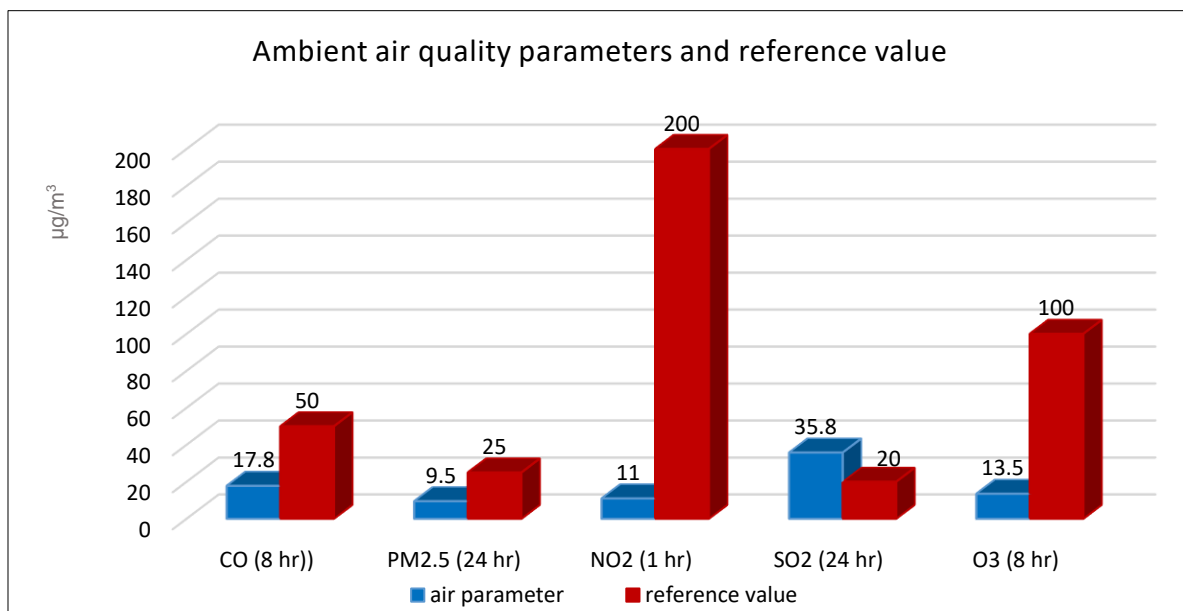


Figure 5.11 Ambient air quality parameters and reference value

Particulate Matter PM (<2.5 µm & <10 µm)

Particulate matter (PM) is the term used for a mixture of solid particles and liquid droplets suspended in the air and can give it a hazy appearance. Particulate matter is composed of both coarse and fine particles.

Coarse particles (PM₁₀) have an aerodynamic diameter between 2.5µm and 10µm. They are formed by mechanical disruption (e.g. crushing, grinding, and abrasion of surfaces) evaporation of sprays, and suspension of dust.

Fine particles (PM_{2.5}) have an aerodynamic diameter of less than 2.5µm. They differ from PM₁₀ in origin and chemistry. The major sources of PM_{2.5} are fossil fuel combustion, vegetation burning, and the smelting and processing of metals. The 24-hourly average values of Particulate Matter (PM₁₀) and Particulate Matter (PM_{2.5}) from sample site revealed 17.8µg/m³ and 9.5µg/m³ which are much lower than National Quality Emission Guideline (NEQG) guideline values 50µg/m³ and 25µg/m³ respectively.

Sulfur Dioxide (SO₂)

Sulfur Dioxide (SO₂) is generated from the combustion of fossil fuels. Sulfur Dioxide (SO₂) irritates the respiratory tract, injures lung tissues, and reduces visibility and level of sunlight. The emission can be controlled by the implementation of recommended engine maintenance programs, good driving practices, installing and maintaining emissions control devices, and implementing a regular vehicle maintenance and repair program.

The 24-hourly average values of SO₂ were compared with the National Ambient Air quality standards and it was found that the recorded value of all the monitored location was little greater (35.8 µg/m³) than the applicable limit of 20 µg/m³ for residential and suburban areas. This may be due to heavy traffic volumes on Kabar Aye Pagoda Road.

Nitrogen Dioxide (NO₂)

Nitrogen dioxide NO₂ is formed by chemical reaction of nitric oxide (NO) and ozone. The main sources of NO₂ are the combustion of fuel and on-road and off-road vehicles. NO₂ decreases lung function and resistance to infection. The gas emission can be monitored by combustion modification, flue gas recirculation, water/ steam injection, and the same measures for SO₂ reduction.

The 1-hourly average values of NO₂ were compared with the national ambient air quality standards and it was found that all the sampling stations recorded values much lower than the applicable limit of 200 µg/m³ for residential and suburban areas.

Ozone (O₃)

Ground-level ozone is not directly emitted into the air, but rather is formed by chemical reactions between NO_x and volatile organic compounds (VOCs) in the presence of ultraviolet (UV) radiation. Ozone is a primary component of smog.

Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can also worsen bronchitis, emphysema, and asthma as well as reduce lung function and inflame the linings of the lungs, permanently scarring lung tissue under repeated exposure.

The 8 hourly average values of ozone were compared with the National Ambient Air Quality Standards and found that sample site recorded value was 13.5 µg/m³ within the applicable limits (100µg/m³) of residential and suburban area limits for all locations in the study area.

Carbon Monoxide (CO)

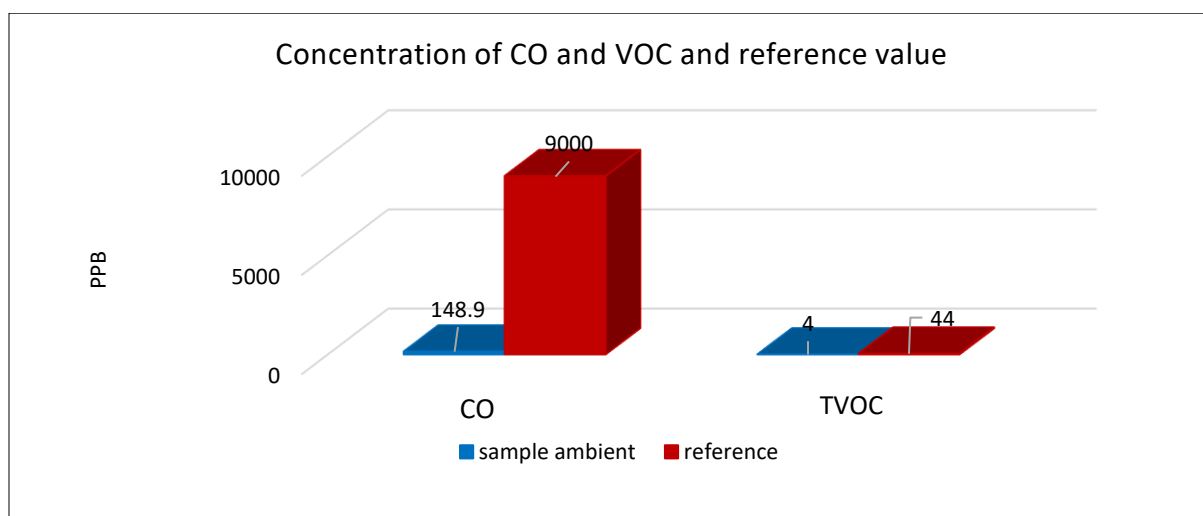


Figure 5.12 Carbon Monoxide (CO) and Total Volatile Organic Compounds (TVOCs) concentration compared with NEQG standard

Carbon monoxide is a colorless/odorless gas and presented small amounts in the atmosphere, mainly from the exhaust of internal combustion engines (including motorized vehicles, portable and back-up generators, lawnmowers, etc.), but also from natural and man-made fires (such as forest and bush fires, and burning of crop residues, etc.).

Volatile Organic Compounds VOCs

Volatile organic compounds (VOCs) are organic chemicals that readily produce vapors at ambient temperatures and are therefore emitted as gases from certain solids or liquids. All organic compounds contain carbon, and organic chemicals are the basic chemicals found in all living things. Many organic compounds in our air today do not occur naturally but are instead man-made, formed during industrial processes or combustion. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects.

The monitoring results show that concentrations for CO and VOCs are within the applicable NEQG guideline levels at the monitoring location for the duration of the monitoring period (Table 5.13, Figure 5.12).

Noise Environment

Noise can be defined as unwanted sound or sound in the wrong place at the wrong time. It can also be defined as any sound that is undesirable because it interferes with speech and hearing, is intense enough to damage hearing or is otherwise annoying.

Sound can be transmitted through gases, liquids, and solids.

5.4.4.2 Ambient Noise Level Standards

The maximum noise level considered to be protective of the environment are defined in the National Environmental Quality (Emission) Guidelines, 2015. For the sound level discussed in the report, the ambient noise level standards are detailed in Table 5.14 below.

Table 5.14 National Environmental (Emission) Guideline

Receptor	One Hour LAeq (dBA) ^a	
	Day time (07:00-22:00) (10:00-22:00 on public holidays)	Night time (22:00-7:00) (22:00-10:00 on public holidays)
Residential, institutional, educational	55	45
Industrial, commercial	70	70

^a Equivalent continuous sound level in decibels

Sources of Noise Emissions Surrounding the Site

The surroundings of Mercure Yangon Kaba Aye Hotel and Service Apartment are commercial and residential areas of Yankin Township. Sound environment is characterized by an urban hub primarily due to high levels of traffic, construction of neighbouring condominium building and residential activity. Baseline noise monitoring was conducted at representative noise sensitive receivers (NSR) located near the Project site which is one of the residence at [Latitude 16° 50' 19"N and Longitude 96° 09' 22"E 96° 09' 22"E], south to the Project site. Hourly A-weighted equivalent continuous sound pressure levels (LAeq, 1 hour) were recorded continuously for 24 hours. Day-time and night-time noise levels in LAeq were calculated by averaging the hourly sound pressure levels measured



Figure 5.13 Noise monitoring device

during the 24-hour period between 07:00 and 22:00 hours and between 22:00 to 07:00 hours, respectively.

Noise levels (LA_{eq}) were recorded using a Type II sound level meter at about 1.5m above ground with no reflecting surface nearby in accordance with the Myanmar NEQ and IFC guidelines. Sampling frequency was at 0.2 second interval for 24 hours continuously. Sound level meter employed for the baseline noise monitoring and the measurement parameter are summarized in Table 5.15.

Table 5.15 Summary of Baseline Noise Monitoring and Noise Criteria

Noise sensitive receivers (NSR)	Noise level	Background Noise Levels, dB(A)			NEQ & WBG Noise Level Guidelines, dB(A)	
		Daytime	Night-time	Total	Daytime	Night-time
Residential	L_{eq}	80	71	78	55	45
	L_{max}	63	58	61	55	45

Notes: (a) Daytime refers to the hours from 0700 hrs to 2200 hrs while night-time refers to the hours from 2200 hrs to 0700 hrs.

(b) Noise levels are averaged from the data obtained for daytime and night-time periods, respectively, and without inclusion of highly intrusive noises.

Note: values exceeding the standard limits are shown in red

LA_{eq} = Equivalent continuous sound level, LA_{max} = Maximum sound level, Unit= dBA

The background noise levels at NSRs exceeded both the noise limits set out in NEQ and WBG General EHS guideline values during daytime and night-time. The dominant sources of noise could be from the traffic along access roads, community activities and construction works adjacent to project area.

5.5 Biological Environment

Since the Mercure Yangon Kaba Aye Hotel and Service Apartment is currently on operation and maintenance stage after succeeding the hotel and its related operation from the MiCasa Hotel Apartments, the examination on the biological environment is not pertinent. In addition, the location of the hotel is at the mid of the urban residential and business district, not biological resources are observed. Therefore, following branches of examination and survey are excluded in the scope of this IEE report.

Vegetation and Forest

Wildlife and Terrestrial Biodiversity

Endangered and Protected Species.

5.5.1 Ambient Biological Environment

Since, the Mercure Yangon Kaba Aye Hotel and Service Apartment is currently in hotel operation and with the exception to refurbishing the existing hotel structure, which is strictly confined within established structure, no new construction activities have been reported. The land use patterns remained unchanged as of the former hotel operator of MiCasa Hotel Apartments. Therefore, the existing biological environment includes only ornamental plants, mini garden and landscaping. In the vicinity of the hotel compound is residential condominiums, private villas and business offices.

5.6 Socioeconomic Environment

5.6.1 Introduction



Figure 5.14 A map of Yangon Region

Yangon, is high and concentrated population density with 5,332,000, people in 2020 which is 1.68% increase from 2019 whereby population in city area is 4,477,638. Male population is 47.8% where female population comprises of 52.2%, which is a ratio of 92 males per 100 females. The population of Yangon has grown about 85 percent from the 3.966 million recorded in 1983. Regarding the population density, Yangon is the highest in the country with 716 persons per sq km. This is approximately nine times higher than the Union level population density of 76 persons per sq km.

It has been documented that Yangon's GDP achieved USD\$10.7 billion with an annual growth rate of 8.5% which accounted for about 23% of Myanmar GDP (2). Yangon is experiencing rapid urbanization and accelerated development as the country moves toward democracy. The current rapid urbanization puts more pressure on the existing old infrastructure in Yangon City and concern for the deterioration of its urban environment is growing. A significant and growing economy has created new employment opportunities in manufacturing, leading to a high influx of people.

The project area is located in Yankin Township shares borders with Mayangon Township in the north, Thingankyun Township and South Okkalapa Township in the east. The Inya Lake, Bahan Township and Myangon Township are in the west and Tarmwe Township is in the south.

ရန်ကင်းမြို့နယ် (YANKIN TOWNSHIP)



Figure 5.15 A map of Yankin Township

5.6.2 Socio-Economic Baseline

This section provides an understanding of the demographic profile of the township and ward that the proposed project situated. The social groups present, the livelihood profile of the community, the common property resources, social and physical infrastructure available in terms of the education and health infrastructure, the water supply for drinking purposes, sanitation facilities and connectivity will be described. The purpose of this section is to allow an increased understanding of the key issues identified as well as identify areas of project in future settings.

Methods

The main objective of the socio-economic study is to assess the possible impact of the project on the socio-economic life of the people in the neighbourhood of the project.

A combination of both quantitative and qualitative method has been adopted for the purpose of this study. The study has been conducted based on primary and secondary data collection and review. The primary data has been collected through interviewing key informants who represent the ward. The secondary data with regard to population, family composition, education, occupation and service provision, amongst others has been collected from statistical records, maps, publications, and online database of the General Administrative Department, Ministry of Home Affairs (2017 data), Ministry of Labour, Immigration and Population (2014 Census data). Data on amenities available in the study area has been reviewed and analysed from secondary sources such as GAD Township reports (2018).

On the basis of impact assessment survey, several questionnaires were developed in line with the objectives of the study. The questionnaires contained both open-ended and close-ended questions.

The data collected during the above survey was reviewed and analysed to assess the prevailing socio-economic profile of the area. Based on that, key impacts on the community have been assessed, and recommendations have been made to address these, and mitigate against any adverse social impacts.

5.6.3 Profile of Yankin Township, Eastern District, Yangon Region

Brief historical background of Yankin Township

The Mercure Yangon Kaba Aye Hotel and Service Apartment lies on the Kabar Aye Pagoda Road within the Yankin Township. The original name of Yankin Township was Kanbe Myoma. During the pre-war time, it was out of Yangon City municipality area and was part of In Sein District. At that time, Kanbe Myoma was ruled by a Town Committee as was the way with other towns having the same status. Yankin Housing Project was implemented in 1952 and Kanbe Myoma was renamed as Yankin Township during the time of the Revolutionary Council Government. It was formed with 16 ward on 10 April 1974 and was then re-formed with 15 ward on 6 January 2006 by the Ministry of Home Affairs.

Location, Population and Religion

Yankin Township with 15 wards in Yangon Eastern District has an area of 1.94 square miles with a population of 66,949 whereby the population density is 14,104 persons per square kilometre. Male population accounted for 32,724 (46.1%) and female for 38,222 (53.9%) who has median age of 31.9 years. It is found that there are more female than males with the ratio of 86 males per 100 females. The entire population of Yankin Township are urban dweller. The majority of the households in Yankin Township are living in apartment/condominium (44.1%) followed by households in wooden houses (29.3%).

It has ethnic groups of Kachin, Kayah, Kayin, Chin, Mon, Bamar, Rakhine, and Shan. Bamar people make up the majority.

Most residents are Buddhists and there are a few Christians, Hindus and Muslims.

Literacy

The literacy rate of those aged 15 and over in Yankin Township is 97.6 per cent. It is higher than the literacy rate of Yangon Region (96.6%) and the Union (89.5%). Female literacy rate is 96.7

per cent and for the males it is 98.7 per cent. The literacy rate for youth aged 15-24 is 98.4% with 98.1% for females and 98.8% for males. Some 3.4% of the population aged 25 and over have never been to school. There are 1.9% of males aged 25 and over who have never attended school as against 4.6% for females. Among those aged 25 and over, 8.1% has completed primary school (grade 5) and 34.6% has completed university/college education.

Education facilities

Yankin Township has 3 pre-schools, 12 primary schools, 7 middle schools, 2 high schools and an education college.

Health and Health Care Facilities

The township has a 550-bed children's hospital, Township Health Department, and 4 private hospitals. Private clinics can be found sufficiently about 70 and the proximity is pretty convenient. Diarrhea, TB and dysentery are common diseases in the township.

Employment and Livelihoods

Apartments built under housing projects in Wards Nos. 1 - 6 are home to retired government employees, and workers of government departments and private companies. The majority of residents in other wards have their own businesses, including trading business, and some residents are casual workers and 4,000 people hold salaried jobs. In Yankin Township, the proportion of employed persons working in the industry of "Wholesale and retail trade; repair of motor vehicles and motorcycles" is the highest with 19.5%. There are about 500 shops selling consumer goods and services. Some residents operating cottage industries, hotel and motel businesses and guest houses. The Public administration including civil servants are accounted for 11.3% which is the second highest industry.

The township has 13 bank branches including 2 public banks.

Social conditions

The township has a township administration office, 15 ward administration offices, some Buddhist monasteries with religious buildings and pagodas, a few Hindu temples, churches, mosques and Chinese Buddhist buildings. It has 4 markets, 2 recreation centres and a playground.

Security

The township has a police station.

Transportation

Over 3,000 households in the township own private sedans and light trucks for travelling and goods transportation. There are a few trailer trucks, three-wheel motorcycles and many bicycles. The majority of the residents use YBS bus services for commuting.

Communication

Over 4,000 households have cable phones and over 10,000 households have mobile phones, each household having at least 2 mobile phones. Almost all households (93.1%) have access to television and the access of communication related amenities and over 5,000 households listen to the radio.

Access to electricity

Almost all (99.0%) households have access to government electricity supply which is the highest group in electricity usage compared to other townships in Yangon Region.

Access to clean water

Almost all households (99.2%) use improved sources of drinking water (tap water/ piped, tube well, borehole, protected well/spring and bottled water/water purifier). Mainly residents have water from Gyo Phyu pipeline (YCDC potable water supply) and only a few 0.8 % use water from hand-dug wells and tube wells. About 50.0 per cent of the households use water from bottle water/water purifier and 45.7 per cent use water from tap water/piped whereas some 0.8% of the households use water from unimproved sources.

Compared to other townships in Yangon Region it is in the highest proportion group of using improved sources of drinking water and it is also higher than the Union average (69.5%).

Toilet use

Nearly all of the households (99.0%) in Yankin Township have improved sanitation facilities with flush toilet (34.6%), water seal (improved pit latrine) (64.4%). Compared to other townships in Yangon Region, the proportion of households with improved sanitation facilities is the highest which is 74.3% at the Union level.

Table 5.16 Summarised data of Yankin Township

Population	66,949	
No. of households	14,514	
No. of houses	7,551	
No. of wards	15	
Ethnic groups	Kachin, Kayah, Kayin, Chin, Mon, Bamar, Rakhine, Shan	
Religions	Buddhists, Christians, Hindus, Muslims	
Area of town	1.94 square miles	
Area of township	1.94 square miles	
Boundaries	Bordered by South Okkalapa T/S and Thingangyun T/S in the east, by Mayangone T/S and Bahan T/S in the west, by Tamwe T/S in the south and by Mayangone T/S in the north.	
Elevation	80 feet	
Climate		
(1) Rainfall	80 inches	
(2) Maximum temperature	40 °C (Degree Celsius)	
(3) Minimum temperature	35 °C (Degree Celsius)	
Natural vegetation	Rain trees, Gum Kino trees, Almond tree	
Land Use		
(1) Township (arable) land	1,243 acres	
Education facilities		
No. of pre-schools	3	
No. of primary schools	12	
No. of middle schools	7	
No. of high schools	2	
No. of education colleges	1	
Health Care		
No. of 550-bed children's hospital (government)	1	
No. of 10-bed hospitals (private)	2	
No. of 4-bed hospitals (private)	2	
No. of Township Health Department	1	
Employment & Livelihoods		
No. of shops	496	
No. of service providers	1,701	

No. of traders	3,154	
No. of workers engaged in handicrafts and workshops	33	
No. of casual workers	5,637	
No. of government employees	9,933	
No. of Cottage Industries	83	
No. of factories, workshops	1	
No. of companies	13	
No. of hotels	11	
No. of motels	1	
No. of guest-houses	1	
No. of banks	13	

Social institutions

No. of ward administration offices	15	
No. of press, computer printing and photocopying, video, and recording	59	
No. of recreation centers	2	
No. of ward markets	4	
No. of monasteries	45	
No. of pagodas	2	
No. of Buddhist religious buildings	13	
No. of churches	3	
No. of Hindu temples	6	
No. of mosques	1	
No. of Chinese temples	1	
No. of libraries	29	
No. of football ground	1	

Security

No. of police stations	1	
No. of military units	1	

Transportation

No. of households which own private cars, light trucks	3,650	
2. No. of households which own motorcycles, 3- wheel motorcycles, electric bicycles	273	
3. No. of households which own trailer trucks	9	
4. No. of households which own bicycles	4,852	

Communication

No. of households with cable phones	4,093	
No. of households with mobile phones	13,270	
3. No. of households with TVs	13,631	
4.No. of households with radio	5,542	



Access to electricity

No. of household using electric light	14,486	
No. of households using kerosene lamps	7	
No. of households using candlelight	85	
No. of households using battery-powered lighting	38	
No. of households with private generators	5	
No. of households with solar panels	1	

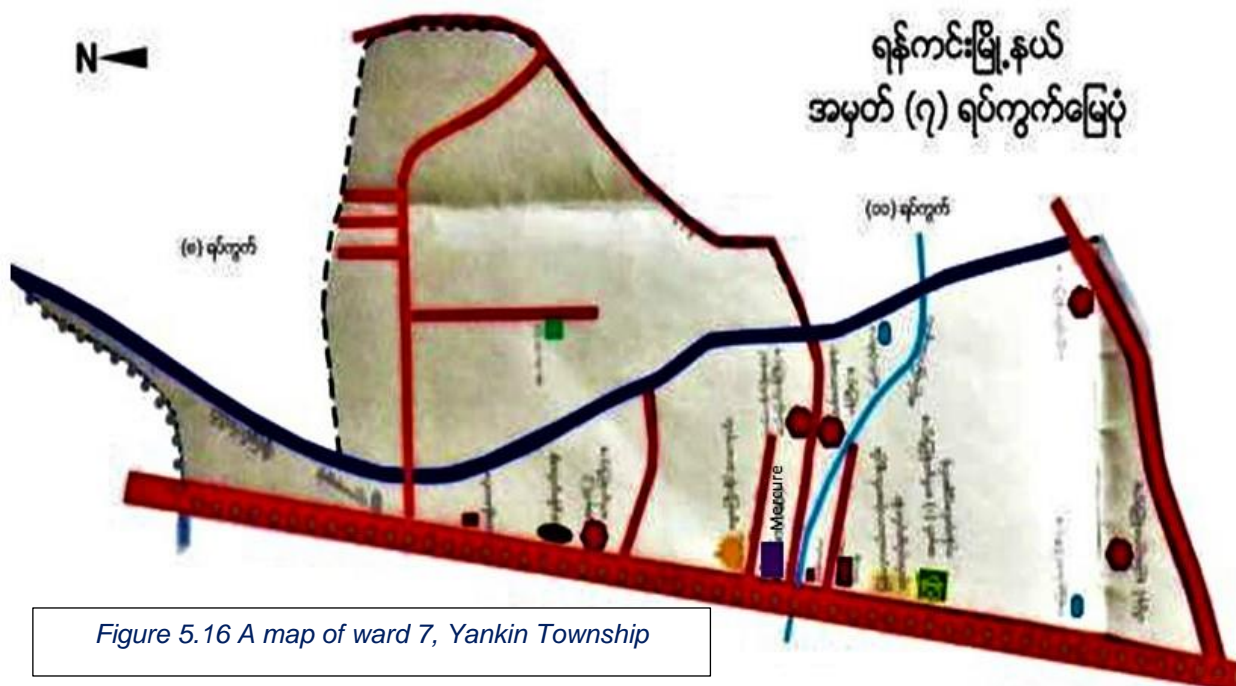
Access to clean water

No. of households using water from hand-dug wells	560	
No. of households using water from city water supply	13,058	
No. of households using water from tube wells	871	

Photographic Record of Yankin Township

	
<p>Moe Kaung Pagoda</p>	<p>Children Hospital</p>
	
<p>Sedona Hotel</p>	<p>Office of the Township Education Officer</p>
	
<p>Township Police Station</p>	<p>Café Dibar</p>
	
<p>Yankin State High School No.1 & its playground</p>	

5.6.4 Profile of No 7 Ward, Yankin Township, Yangon Region



Location and Population

No. 7 Ward in Yankin Township is located to the northwest of Yankin Township. It is bordered on the east by Ward No. 11 and on the west by Kabar Aye Pagoda Road and Mayangone Township. It is bordered on the north by Ward No. 8 and on the south by Kanbe Road and Ward No. 6. There are 166 houses and 456 households in Ward No.7. The ward has a total population of 2,288. Most ward residents are Myanmar but there are also a few Rakhines, Kachins and Indians. Most of the residents are Buddhists. There are a few Christians and Muslims.

Education

Ward No.7 has a middle school and a Township Education Officer's Office. There are no primary school and high school.

Health

There is a government children's hospital. Ward No.7 has no private clinic or hospital.

Economy

There are government offices, hotels and commercial buildings in No. 7 Ward. There are a few groceries, restaurants and cafes. Only 3 shops are there. One hotel has been launched. Another is still under construction. Most of the residents in this ward are government employees. A car showroom, an electrical supplier show room and an esthetic clinic are in the neighbourhood.

Social Situation

Ward No.7 has a ward administrator's office and five government department offices. There are no workshops and factories. Regarding religious buildings, there are a monastery, a Dhammayone (Buddhist community hall), and a pagoda. There is no mosque or Chinese communal temple. The ward has two libraries. One is a ward library, and the other is the National Library. There are also departmental offices of two Ministries and a Regional Investment Committee Office.

Security

There is a police officer's office of Yankin Township and a police station in No. 7 Ward. There is also a military compound belonging to the Ministry of Defense.

Roads and Communication

Generally, people of the ward commute by YBS public transportation buses. Some use their own cars. There are altogether 65 private cars. There are no taxi-drivers or trishaw-carriers. Most people have mobile phones. There are only 55 land line phones. Most households have TV sets and satellite TV system.

Water and Electricity Supply

Houses, offices, hotels, commercial buildings and religious buildings receive electricity from the government supply. Water supply is provided through Gyo Phyu pipeline, mainstay of the city's water supply system.











Table 5.17 Data on No.7 Ward, Yankin Township, Yangon Region

Population	2,288 People
No. of households	456
No. of houses	166
Ethnic groups	Bamar, Rakhine, Kachin, Muslims
Education	
No. of schools	1 middle school
Health care	
Public hospitals	1 Children Hospital
Business	
No. of shops	3
No. of hotels	2
No. of car showroom	1
Social and administrative data	
No. of ward administrator's office	1
No. of banks	1
No. of libraries	2
No. of pagodas	1
No. of monasteries	1
No. of religious buildings	2
No. of government departments	5
No. of township education office	1
Security	
No. of military units	1
No. of police stations	1
Transportation	
No. of private cars	75
Communication	
No. of cable phones	55
No. of mobile phones	900
No. of TVs	450
No. of houses with satellite connection	50
Access to electricity	
No. of households with electric light	All households
Access to clean water	
No. of households with water pipelines (access to town water supply system)	All households

Population	2,288 People
No. of households	456
No. of houses	166
Ethnic groups	Bamar, Rakhine, Kachin, Muslims
Education	
1. No. of schools	1 middle school
2. Administrative Office	1 Township Education Office
Health care	
1. Public hospitals	1 Children Hospital
Business	
1. No. of shops	3
2. No. of hotels	1
3. No. of car showroom	1
Social and administrative data	
1. No. of ward administrator's office	1
2. No. of banks	1
3. No. of libraries	2
4. No. of pagodas	1
5. No. of monasteries	1
6. No. of religious buildings	2
7. No. of government departments	5
Security	
1. No. of military units	1
2. No. of police stations	1
Transportation	
1. No. of private cars	65
Communication	
1. No. of cable phones	55
2. No. of mobile phones	900
3. No. of TVs	450
4. No. of houses with satellite connection	50
Access to electricity	
No. of households with electric light	All households
Access to clean water	
No. of households with water pipelines (access to town water supply system)	All households

Photographic Record of Ward No.7

Zina Man Aung Pagoda

	
Dhama Sacca Monastery	Ward Administrator Office
	
Ward Library	Gate of Military Unit Compound
	
Office of the Township Education Officer	Department of Research and Innovation under the Ministry of Education
	
KIA Motors Showroom	Yankin Children Hospital
	
Township Police Station	Yangon Region Investment Commission Office



SECTION 6. IDENTIFICATION AND ASSESSMENT OF POTENTIAL ENVIRONMENTAL IMPACTS

6.1 Introduction

Potential environmental impacts and mitigation measures

The potential environmental impacts triggered by the hotel operation are identified in this Initial Environmental Examination (IEE). The scope of this IEE covers:

- Screening of Project Phase and Assessment Methodology
- Identifying positive/negative environmental impacts
- Mitigation Measures, and
- Environmental Management Plans.

Base on the site visits, corporate technical and engineering information, and baseline environmental data of focused areas, the sensitivity and behaviour of key environmental receptors relating to project operation are thoroughly measured and considered. Furthermore, existing state and district legislative controls and project proponent's policy and practices applicable to the project are also contemplated for mitigation measures made in this section. The recommended actions and plans for minimizing subsequent irreversible and residual impacts are proposed in the environmental management plans.

6.2 Screening of Project Phase and Assessment Methodology

All the hotel operations, facilities and services were assessed across three crucial environmental components: physical, biological and socio-economic environment. As the hotel is currently fully functioning its business activities, the screening covers only upon the operation and maintenance phase of the project.

The assessment methodology is based upon key areas, categories and characteristics for identified and predicted impacts. The summary of assessment approaches is shown in the Table 6.1. It should be noted that not all impacts are applicable to each individual category, but somehow there are several the scenarios where multiple categories are concerned and interrelated among impacts occurred from interdisciplinary impacts of environmentally importance (e.g. biodiversity and socio-economic, etc).

Table 6.1 Inventory of the Assessment Methodology.

Sr.	Categories	Characteristics (Ascending Orders →)	Keys Environmental Components 1. Physical 2. Biological 3. Socio- Economic
1	Nature	Indirect / Direct	
2	Duration (term)	Short / Medium / Long	
3	Geographical Features	Local / Regional/ Transboundary	
4	Frequency	hourly / daily / weekly	
5	Reversibility	Reversible / Irreversibility	
6	Likelihood	Rare / Unlikely / Possibly / Likely / Certain	
7	Severity	Negligible / Minor / Moderate / Major	
8	Significance	Low / Medium / High	

6.3 Identification of the Potential Impacts Assessment

6.3.1. Construction Phase

This hotel was built by MiCasa Hotel Ltd since 1997 with the permission of the Department of Urban and Housing Development. Construction of the hotel was completed in 1998 December 15 and the property has been operating since 1999 under the name of MiCasa Hotel Apartments. Therefore impacts generated from construction phase could not be assessed.

6.3.2 Operation and Maintenance Phase

The potential impacts associated with Operation and Maintenance (OM) activities of the hospitality industry are mainly originated from providing goods and services for the clients (guests) and its related supporting logistical issues. A list of identified and predicted impacts driven by operation and maintenance of the hotel are set out below.

6.3.2.1 Physical Environment

Urban Microclimate and Adaptation

It is likely that the hotel operation could trigger low impacts to the microclimate occurred in the vicinity of the hotel buildings. The heat and steam evolved from the cooling tower of the HVAC system and split type air conditioning units for hotel ventilation system adds up ambient temperature and relative humidity. The exterior concrete structure of 7-storey building also rises thermal convection of sunlight during the day. These impacts were found superseded by introducing access road which spaces the hotel buildings and nearby residential buildings. Nevertheless, by the combination of concrete pavements and sprawling high-rise buildings development found neighbourhood of the hotel could affect the city environment and quality of life by heat related health problems and general discomfort. With the absence of the clear spacing between hotel building and boarder fence, the situation can intensify heatwaves in-between hotel facilities and the neighbourhood during abnormally hot and humid seasons.

Air Quality

There are several sources that could either directly or indirectly degrade ambient air quality present in the proximity of the hotel. Although, emission from HSD diesel generator is only envisage occasionally on condition when there is power cut or shortage, pollution from increased traffic become one the significant factor for reducing air quality. There are two derivations of traffics which are internal traffic load of personnel and logistic for good and services, and private automobiles of guests and clients. Depends on guest occupancy and public events, the impact on air quality can be medium and high.

Furthermore, the smoke and smell released from catering services (i.e. kitchen and restaurant), sewer pipeline, and sewer treatment plant does have concern on air quality. The likelihood of impact on air quality is assessed as possible.

Water Quality

The operation and maintenance of the hotel has low contribution on the water quality of natural environment. The processed sewer is discharged into public drain which convey domestic sewer of the residential and ends up in outfall sewer. Surface infiltration or interflow into subsurface water source is not likely to occur because of rectangular cast iron and brickwork closed conduit with concrete lining.

Nevertheless, trace of oil and grease spill could lead to nuisance to surface water during wash out and overland runoff during raining season. The overall severity to the impact on water quality is negligible and low.

Solid Waste Generation

The discarded waste generated from the hotel operation and maintenances is a challenge regardless of project size and scale. Solid waste production is as the result from personal goods, foods residues to commercial waste from the hotel's services. Therefore, impact of solid waste generation can be assessed as medium to high. Strictly control and management measures is crucial to contain solid waste driven environmental pollution and public health. Solid waste abatement and practices applied in the Mercure Yangon Kaba Aye Hotel and Service Apartment is unlikely to cause burdens to nearby environment as long as in-house waste collection and management employees adheres established The Mercure's environmental guidelines from inception sources to the dumping locations. Apparently, the characteristic of solid waste disposal of hotel operation and maintenance is persistent its business function continues.

The consideration for the progression of solid waste volume over time after transferring the bulk to either private or public municipal service is beyond this scope of the IEE. However, in the case of scheduled waste collection break down arisen, the contingency plans are necessary. Otherwise, the mounting garbage turns as the epicentre of public health concern and nuisance site.

Wastewater Disposal

The extent and magnitude of wastewater is being an imperative subject for the operation and maintenance of the hotel. This topic deals with all enlisted categories of the assessment methodology. The impact significance can be managed to minimal by means of engineering and technological intervention. Because of wastewater treatment plant stationed underground inside the Mercure Yangon Kaba Aye Hotel and Service Apartment compound, the environmental impact by effluent wastewater can be rated into moderate for severity, likely for environmental problem related incidence, and the significance level as medium. The treatment plant with 500m³/m/day capacity is designed to be sufficient to treat cumulative sewage during business as usual. However, it is very likely that short term environmental problems could be encountered during wash out and overhaul maintenance period since there is only one treatment plant and appearances sets retains the overall impending sewer loading. In this circumstance, the environmental problems that are in connection with wastewater nuisance and contamination can be culminated to hazardous and contagious level.

Hazardous and Toxic Substances/wastes

The application of Hazardous and Toxic is indispensable for the operation and maintenance related activities in the hospitality industry. They can be classified into (1) ignitable, (2) corrosive, (3) reactive, and (4) toxic. The infliction from these sources are rather first associated to health and safety of concerns for hotel employers those are dealing with them in their daily routine. Other remaining factors includes provisional safety measures, storage location and choices on the products. Based on site visit and hotel's underlying code of conduct on handling and the application of hazardous and toxic substances, the possibility for environmental risks and haphazard is low and unlikely.

Soil Sedimentation and Erosion

Despite the fact that the hotel operation and maintenance activities does not belong to earthwork, soil erosion and sedimentation is expected to occur from watering (splashing) and gardening works. With the land use for gardening and horticulture is just mediocre, soil sediment and erosion

are identified low and rare. In addition, the installation of separate storm drains in closed concrete circular channel and all surface topsoil was turned into impervious surface, negligible surface erosion and sedimentation during prolong precipitation is anticipated.

6.3.2.2 Biological Environment

Since the Mercure Yangon Kaba Aye Hotel and Service Apartment is currently successfully on operation and maintenance stage after succeeding the hotel and its related operation from the MiCasa Hotel Apartments, the examination on the biological environment is not pertinent. In addition, the location of the hotel is at the mid of the urban residential and business district, not biological resources are observed. Therefore, following branches of examination and survey are excluded in the scope of this IEE report.

Vegetation and Forest

Wildlife and Terrestrial Biodiversity

Endangered and Protected Species.

6.3.2.3 Social Environment

Positive Impact on Local Economy

As Mercure Yangon Kaba Aye Hotel and Service Apartment is in operation stage the communities has already got adaptation to new social and economic conditions. Stakeholders and people within the project site and its area of influence have no objection of existence of the hotel. Improve business in neighbourhood mini stores and retail shops is reported.

Community Grievances

The community can have grievances arisen from different operational activities. These grievances are related to traffic, water use, drainage blockage, and smell from kitchen, electricity consumption and community health and safety. It is reported that some of the neighbours feel inconvenience due to noise and fog generated from mosquito fogger machine while blowing the fog in the hotel compound.

Workers' Grievances

During operation phase, complaints of workers related to the following and others can arise: working conditions, occupational health and safety and occupational hazards, and salaries, wages and leave entitlements. However, worker's grievances are not anticipated

Traffic Congestion

Sein Lè May Avenue Street is a narrow residential lane width about 4 meter. Entrance and exit gates of the hotel are on that street. The street is the entrance of government offices such as an office of Myanmar Oil and Gas Enterprise (MOGE), two department offices of Ministry of Agriculture, Livestock, and Irrigation (MOALI), Department of Agricultural Land Management and Statistics and Department of Agricultural Mechanization and International School. During the rush hour Sein Lè May Avenue street has a heavy traffic with passenger cars going to and coming from government offices and International School.

Leaving from the exit gate of the hotel can cause traffic delay if the security officer from the hotel constantly holding of vehicles passing over.

Likewise, snarled-up traffic on the Sein Lè May Avenue Street at the direction to Kabar Aye Pagoda Road is a chance of delay for the guests' cars during rush hours.

Community Health and Safety

Due to the project operations, the water quality, water availability, traffic safety can be affected and consequently, the surrounding community health and safety could be threatened.

Increased Water Use

Hotel will use water for guest rooms, laundry, kitchen, restaurant, landscaping, public toilet etc. The increased amount of water usage may have an impact on the surrounding community's water availability. Hotel will be mainly using YCDC water supply system and tube wells will be used as reserved water sources.

Increased Electricity Use

The project will consume large amounts of electricity due to different project operation activities. This may impact on the power distribution to the surrounding community and the stability of power system.

Increased Emergency Risk

In this operation stage, different hazards scenarios, namely, fire, earthquake, storm, infrastructure failure can be expected.

Noise pollution

The noise can be generated from generator for electricity supply during the failure of Government electrical power system.

Impact Mitigation Measures

The operation and maintenance of hotel functions do not trigger significant and complex or adverse impacts to the natural environment. Therefore, the project does not need profound long-term investigation to assess adverse impacts in the current phase. However, to address the presenting identified potential impacts during hotel operation and maintenance to acceptable levels, the Mercure Yangon Kaba Aye Hotel and Service Apartment is highly encouraged to adopt mitigation measures discussed in the EMP and its adapting corporate environmental guidelines, emergency and contingency plan at its ultimate level.

Cumulative Impact Assessment

The cumulative impact assessment is designed for examining the interactions among identified impacts that is likely to persist aftermath of mitigation applied. The impacts could also origin either from pre-construction phase or those associated with the existing that last as long as the project exists. The consequences of the cumulative impact create both positive and negative as residual impacts. These impacts are weighed against socio-economic sustainability and environmental cost of that society in which the project is directly accounted for. The interpretation to the project merit can be made by the results of evaluation on identified impacts developed during each phase of the project versus residual cumulative impact. The following table summarizes cumulative impacts (both positive and negative) resulted from the project.

Table 6.2 Potential cumulative impacts due to the hotel operation and maintenance activities

Positive Impacts	
Impact Category	Outcomes
Economic Growth	The hotel operation encourages private/corporate spending on consumer products, goods and services, thereby it stimulates economic growth.

Job Opportunities	The hospitality industry needs mass employment for facilitating efficient and convenient services in both operation and maintenance sector.
Negative Impacts	
	Mitigation Measures
Energy	Conducting periodical energy audit and utilizing energy efficient appliances.
Water	Ensure managing water wastage and conduct instant maintenance to the leak.
Wastewater	Prevent overflowing and inundation in any circumstance. Effluent water quality needs to be checked periodically either weekly or biweekly.
Solid Waste	Temporary storage facilities are made enough to stockpile daily production. Back up disposal workforce is made ready during municipal collection service disruption.
Air Quality	The ventilation fans installed at the kitchens need to be checked functioning routinely. Connections and joints of exhaust hood are thoroughly connected along the channels.
Traffic Congestion	It is important to provide enough parking spaces. Private traffic management team are set up at entry and exit.
Occupational Health and Safety	Safety training and investigation need to be conducted routinely. Enough PPEs and first aid kit need to be provided within short reach.
Toxic and Hazardous Goods	The stockpile policy for these goods needs to be ensured within restriction limit. Any dubious discrepancy or loss needs to be investigated and recorded.
nCommunity grievance due to 'mosquito fogger'	Usually the mosquito fogger is large and noisy machine. Inform the neighbours before the mosquito fogging operations and convey the message that the concentrations of insecticide in the fog is small and no adverse effects on people who are occasionally exposed to the fog.

Identified Environmental and Social Impact – Operation and Maintenance Phase

Env. Setting	Direct Impact	Indirect Impact	Duration Frequency	Reversibility	Likelihood	Severity	Significance
Physical Environment	Noise		Long term and daily	Reversible	Certain	Major	Medium
	Air Quality			Reversible	Unlikely	Negligible	Low
	Waste-water			Reversible	Likely	Moderate	Medium
	Solid waste			Reversible	Likely	Minor	Low

Env. Setting	Direct Impact	Indirect Impact	Duration Frequency	Reversibility	Likelihood	Severity	Significance
Biological Environment	Un-identified	Un-identified	None	None	None	None	None

Env. Setting	Direct Impact	Indirect Impact	Duration Frequency	Reversibility	Likelihood	Severity	Significance
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Social Environment	Occupational Health and Safety - Risk of injury - Noise - Heat stress - Air pollution		Long term and daily	Reversible	Likely	Moderate	Medium
		Community health and safety - Dust emission - Noise - Road obstruction - Road damage	Long term and daily	Reversible	Likely	Minor	Mild

6.3.3 Decommissioning Phase

The expected service lifespan of proposed project is 50 years. During decommissioning phase, the main activities will be demolition of structures, transportation of demolished structures and restoration, dismantling equipment. The following impacts are anticipated.

Dust and exhaust emissions

Demolition of existing facility and building/ structure will be generated large quantities of dust pollutant dust around the facility. Particulate matter pollution is likely to occur during demolition and transportation of the construction waste. There is possibility of suspended and settle-able particles affecting the site workers and the surrounding neighbours' health. Exhaust emissions are likely to be generated during the demolition period by the various machinery and equipment to be used as well as motor vehicles used for the exercise.

Soil contamination

Solid waste generation - Accumulation of solid waste such as debris, rubbish and demolition materials and spillage of oil, diesel or solvents by vehicles are common with decommissioning works if not effectively controlled. It could lead to soil contamination and degradation of surface water quality. Demolition of the project buildings and related infrastructure will result in large quantities of solid waste. The waste will contain the materials used in construction including concrete, metal, wood and, glass. Although demolition waste is generally considered as less harmful to the environment since it is composed of inert materials, there is growing evidence that large quantities of such waste may lead to release of certain chemicals into the environment.

Accidental spills - These may originate from equipment's and removal of installations containing hazardous substances e.g. Laundry chemical storage containers, fuel storage containers

Excessive Noise and Vibration pollution

The demolition activities such as movement and activities of decommissioning equipment, machine and vehicles will lead to significant deterioration of the acoustic environment within the project site and the surrounding areas. This will be as a result of the noise and vibration that will be experienced as a result of demolishing of the proposed project buildings and related components.

Accident and injury

There is risk of accident and injury to workers during demolition of structures.

Identified Environmental and Social impact – Decommissioning Phase

Activities	Impact	Duration Frequency	Reversibility	Likelihood	Severity	Significance
Demolition building structures	Dust and exhaust emissions	Short term	Reversible	Likely	Minor	Low
	Noise	Short term	Reversible	Likely	Minor	Moderate
	Accident and injury	Short term	Reversible	Possibly	Moderate	Moderate
Accidental spills	Soil contamination	Short term	Irreversible	Unlikely	Minor	Low
Solid waste generation		Short term	Reversible	Likely	Minor	Moderate

SECTION 7. THE PUBLIC CONSULTATION AND PUBLIC MEETING


Public consultation and public meeting are planned to carry out as part of the IEE to inform and obtain opinions of the public about the project. Public consultation meeting was originally scheduled for first week of April 2020 with representatives from the Ward Administrator, 7th Ward, Yankin Township, governmental officials concerned from the Township General Affairs Administration Department, township auxiliary fire brigade commander, assistant ward administrators, private entrepreneurs and residents of Ward No.7. However, protecting the health, safety and well-being of attendees, MSR has made the necessary decision to postpone the public consultation meeting in the light of the coronavirus (COVID-19) pandemic.


Social impact assessment was completed to identify the key issues and impacts of the proposed project. Views from the local residents and any other affected parties surrounding the proposed project were sought through interviews. The key informant interviews involved people who are living or working in the project area and its neighbourhood. In the course of the interviews people were informed about the project, gathered comments, concerns and suggestions on hotel operation, current environment conditions and potential impacts on their livelihoods.

7.1 Key Informant interview


Key informants are people who have relevant knowledge and insight. Interviews conducted during the month of February 2020 aimed to gain an understanding of the perspectives of community regarding the proposed project and to gather information comes from the person's area of expertise. Key informant interviews were performed by consulting up to 17 key informants. They were selected on the basis of their legitimacy and authority in the Study area; on their significance in delivering services to the local population or their role in the area's economic development; and on their knowledge on a specific topic in the local context.

Key Informant Interview concerning Mercure Yangon Kaba Aye Hotel and Service Apartment

1	Name	Daw Naw Kabel Say	
	Age	46	
	Business/ Job	Mercure Hotel	
	Position	Assistant Talent and Culture Manager	
	Address	40, Hledan Lane, Kyinmyindine	
	Phone No.	09791993492	
<p>I am Naw Kabel Say, HR Manager of the hotel. It has 150 employees, including those who worked in the MiCasa Hotel. There is a good relationship between hotel employees. They are in good terms with people from the surroundings. We can sometimes hear loud noises from the condo constructions around the hotel. There is no complaint of people from the surroundings about the hotel. There is arrangement for the hotel employees to express their complaints- but not for the outsiders. Guests are checked for infections before they are allowed to stay in.</p> <p>I have been working in this hotel for 18 years. Almost all employees are Myanmar citizens except for foreigners. It had been working in the name of MiCasa Hotel before it was bought by Mercure Hotel business, and renovated in 2016.</p>			

2	Name	U Soe Myint Oo	
	Age	50	
	Business/ Job	Police Force	
	Position	Police Captain	
	Address	Township Police Compound, 7 th Ward, Yankin	
	Phone No.	09 133 57 05	

I am police Captain Soe Myint Oo. I haven't been here for long time. I came from Chin State. I know the Mercure Hotel, but I don't know it has changed its name MiCasa Hotel. I don't think the hotel will have bad effects on the environment. We haven't dealt with any case connected with the hotel. There are departmental offices and a private school in the ward behind the hotel. There is usually heavy traffic- more incoming and outgoing cars at the time the school is over. There can be traffic congestions on the road beside the hotel. Cars coming out from the hotel use that road. Most people in the 7th Ward are employees, so there is no crimes. Hotel employees and guests should keep discipline so that the hotel has no bad effects on the environment. The hotel should manage for its Air conditioners should be turned off if not necessary. They can get heated causing fire outbreak, and the gas from them can damage the ozone layer.

3	Name	U Myo Hlaing	
	Age	40	
	Business/ Job	Kakehasgi Construction Co.	
	Position	Project Manager	
	Address	49, Mingala Street, 8 th Ward, Kawmayut	
	Phone No.	09 250 359301	

I'm U Myo Hlaing, working on Green Inya Condo Project, No.1 condo has been completed and No.2 is under construction. Mercure Hotel construction does not have many effects on the environment, expect for loud noises we can sometimes hear. The condo will have a lot of guests if all rooms are occupied and so will the hotel. But it will not have effects on the hotel. There may be traffic congestions sometimes. This ward has MIS Private High School. When the school is over and the office hours are over, there are many cars in this area. So there may be traffic congestions when there are outgoing cars from the hotel. But there will be no problems if the hotel can manage it. The water from the hotel flows into the drain and then into the drain of Kabar Aye Pagoda Road. There will be no bad effects on the environment as the waste water is treated before it is disposed of.

4	Name	U Mya Aye	
	Age	57	
	Business/ Job	Sein Lè May Condo	
	Position	Security Officer	
	Address	9 (A), Bo Aung Kyaw Street, Bo Tun Zan Ward, Dawbon.	
	Phone No.	09 443 948 855	

I'm U Mya Aye. I have been working as Security Officer of Sein Lè May Condo for 4 years. The condo doesn't yet have residents. It has 11 levels with 11 apartments — only one apartment at each level. I don't think the Mercure Hotel construction, or its operation will have bad effects on the environment. I can't hear loud sounds or get bad smells. I haven't heard of any problem over my four years' service here. The waste water from the hotel is disposed of water it has been treated. We don't work at night. So the hotel is not annoyed by us. But there may be traffic congestions sometimes as cars use the same road, but they can be managed. Our condos have a car park for 11 cars. I have nothing also to say.

5	Name	Daw Yin Yin Htway	
	Age	40	
	Business/ Job	City Point Mart, Green Inya Condo	
	Position	Officer – in - charge	
	Address	19 (A), Sein Lè May Avenue Street, 7 th Ward, Yankin	
	Phone No.	09 421 079 553	

My name is Daw Yin Yin Htway. This shop has been opened for over a month. I am a relative of the owner so I am taking care of it as my own shop. Some shop workers are also related to the owner. We sell snacks and soft drinks. It's opened from 9 in the morning until 9 in the evening. The shop doesn't yet have many customers. Some hotel workers and guests buy things from us. I can't see any bad smells or see any waste water from it. It is silent at night as it has no KTV. But there can be traffic congestions if it has many guests. It has no bad effects on our shop. People from the hotel buy things from us so it is advantageous to us.

6	Name	Daw San San Nu	
	Age	56	
	Business/ Job	Business Woman	
	Position	Owner of City Point Mark	
	Address	19 (A), Sein Lè May Avenue Street, 7 th Ward, Yankin	
	Phone No.	09 799 234 748	

I'm Daw San San Nu, owner of Green Inya Condo and City Point Mark. I have another shop in North Dagon, and More Eain permitted water factory in East Dagon. The water there contains a little iron, but I have treated it so that it has a pH of 7. Hotel employees and guests buy things from us. Some guests order things from us. I have a plan to expand by business, capitalizing on the potential demand of the hotel and the people in the surroundings for food. I am in friendly terms with the hotel employees. I am going to sell orange vegetables and food to the linking of foreigners. The hotel construction has no bad effects on the condo or our shop. It is advantageous to us.

7	Name	U Aeiddhi Ka	
	Age	45	
	Business	Monk	
	Position	Chief of the Monastery	
	Address	Dahma Seca Yeiktha Monastery, Kabar Aye Pagoda Road, 7 th Ward, Yankin	
	Phone No.	09 20 33 980	


My name is U Aeiddika, I have been living in this monastery for a long time. MiCasa Hotel has its name changed to Mercure Hotel. I am a friendly terms with people from the hotel. As far as I know, the hotel has no bad effects on the environment. Hotel employees also provide the monastery with what it needs. They give me plastic bags to pack in the rubbish from the monastery, and put the rubbish bags onto the rubbish truck of the Development Department once a week. The monastery has 5 nuns and 15 monks. We have two meditation sessions every year. The hotel employees must arrange so that there is no loud noise at the time of meditation. The hotel doesn't have bad effects on the monastery.

8	Name	Daw Su Su Swe	
	Age	35	
	Business	Sein Lè Aung Condo	
	Position	Engineer	
	Address	Sein Lè May Avenue Street, 7 th Ward, Yankin	
	Phone No.	09 420 715 283	

My name is Daw Su Su Swe. I have worked in Sein Lè Aung Condo for 5 years. There is no problem between our condo and the hotel. The hotel has no problem with the ward either. The hotel has changed its name from MiCasa to Mercure. It has no bad effects on the environment. Increasing number of hotels and condos is something the ward has to be proud of. If the condo has a lot of residents there will be a lot of cars in the ward. The ward has a DICA Office, private schools and public schools. So if the hotel has a lot of guests, there will be more cars coming into or going out of the hotel. This will cause traffic congestions. The hotel sprays insecticide in the ward on 3 days a week. That is advantageous to the hotel and the environment. This is as far as I am concerned. That's all I have to say.

9	Name	U Ko Zaw	
	Age	40	
	Business	Electronic Devices Shop (Soe Aung & Brother)	
	Position	Supervisor	
	Address	930, Zeyar Myaing Street, 53 rd Ward, South Dagon.	
	Phone No.	09 421 093 265	


I am U Ko Zaw, I have been working at Soe Aung & Brother Electronic Devices Shop for a long time-since the time of the hotel's old name MiCasa Hotel. The hotel doesn't always have bad effects on our shop. It buys things from us, and so do the guests. Any business may have good effects as well as bad ones. The hotel is advantageous to us when it buys things from us. It has bad effects sometimes-volumes of smoke from the generator-engine of the hotel will come to us at times of power failure. The hotel doesn't give off bad smells or make loud noises. It should do something to control the engine smoke. I have nothing else to say.

10	Name	U Myo Myint	
	Age	73	
	Business	Auxiliary Fire Brigade, Yankin	
	Position	Deputy Commander	
	Address	Room 01, Building 8/1, Yanaye Housing Project, 5 th Ward, Yankin	
	Phone No.	09 321 160 87	

I am U Myo Myint, Deputy Commander of Yankin Township Auxiliary Fire Brigade. I have been on the fire services since 2003- since the hotel was under the name MiCasa Hotel. Now I continue my service with the hotel. I have trained the hotel employees in fire extinguishing, formed them into 5 groups, and issued the fire security certificates for the hotel. It has completed fire extinguishing apparatus. Over training includes rehearsals for fire extinguishing. There are good buildings in the surroundings, so I think we don't need to worry about fire outbreaks. The hotel has circular roads wide enough for fire trucks to move about. I would like to suggest that the hotel employees and guests keep discipline, preventing fire outbreaks.

11	Name	U Min Maung Maung	
	Age	39	
	Business	General Administration Department	
	Position	Township Administrator	
	Address	Employee Housing Project, Yanaung Lane (6), 2 nd Ward, Yankin	
	Phone No.	09 830 4397	


I am U Min Maung Maung, Yankin Township Administrator. I know the Mercure Hotel-its old name was MiCasa Hotel. But its appearance doesn't change much. Hotels do not usually have so many bad effects on the environment, but they may have a few. This hotel has been existing for a long time, so it must be getting on well with its surroundings. I haven't heard any news of loud noises or waste water from the hotel. It is a good thing that there are hotels with the changing of time. It is a smokeless factory. But, Yangon City, with the increasing number of hotel, will have more guests and more traffic congestions-traffic will be congested in the future even if it isn't now. So I would like to suggest that the hotel do some survey and find ways to reduce the traffic congestion.

12	Name	Daw Swe Zin Lè	
	Age	40	
	Business	Beauty Cleaner	
	Position	Office Manager	
	Address	16/5, Thiri Mingalar Avenue, 7 th Ward, Yankin	
	Phone No.	09 262 001 100	


My name is Daw Swe Zin Lè. I am the Office Manager of Beauty Cleaner Shop. I have been working here for a few months. I came here after the hotel was renamed as Mercure. The hotel has no bad effects on our business. It doesn't make loud noises, or dispose of rubbish, or waste water recklessly. But I have one thing to say: there is a pond nearby that is like breeding spot for mosquitoes. We spray insecticide in our building and its surroundings once a week. Mercure Hotel also sprays insecticide, but it makes a loud noise and the smoke annoys the people in the surroundings. We have insecticide sprayed in association with a company. There is no loud noise or much smoke. I would like to suggest that the hotel use that sort of spraying machine. I have nothing else to say.

13	Name	U Htein Lin	
	Age	57	
	Business	Excel Security Service Company	
	Position	Security Worker	
	Address	Ananpin North Ward, Mingaladon Township	
	Phone No.	09 689 413 555	


I am U Htet Lin, I have been working as security worker in this condo for a year. I am from Excel Security Service Co in Nawaday Housing Project in Hlaingtharyar. Construction of the condo has stopped for a year. It has one security officer-in-charge and 2 security workers, who are responsible for taking care of construction materials here. But I don't know which company is building the condo. I find the Mercure Hotel is very peaceful. It doesn't make loud noises. Rubbish or waste water from it doesn't annoy us. It doesn't need to worry about fire from the brick wall between the hotel and our building. It is a good thing that the hotel is here. The State will get some tax. It doesn't annoy our building or the people in the surroundings. I have nothing else to say. The address of the building is 18/5 Thiri Mingala Avenue Road, 7th Ward Yankin.

14	Name	U Kyaw Soe	
	Age	60	
	Business	Photography	
	Position	Ward Administrator	
	Address	1, corner of Pyaidawaye Avenue lane and Kabar Aye Pagoda Road, 7 th Ward, Yankin	
	Phone No.	09 4430 13561	

I am U Kyaw Soe, administrator of 7th Ward, Yankin Township. My business is photography. I do outdoor photography. I know the Mercure Hotel. Formerly called MiCasa Hotel. I have known it since it was under the old name. It has had no bad effects since then. It doesn't make loud noises, give off bad smells, or dispose of waste water or rubbish. But there are condos around it, and departmental offices in the ward. So, there can be traffic congestions, as the road beside the hotel is narrow. So, I would like to request it to manage the traffic. So as to reduce traffic congestions. I have nothing else to say.

15	Name	U Tun Wai	
	Age	59	
	Business	General Administration Department	
	Position	Clerk	
	Address	9(A) Sithu Street, 7 th Ward, Yankin	
	Phone No.	09 250 247 433	

I am U Tun Wai, a native of Mawlamyaing. I have lived here for more than 40 years. Our family has 4 members. I am a clerk at the Ward Administration Office. I know the Mercure Hotel. It was known as Micasa Hotel in the past. It hasn't caused any problem. I have never heard of it giving trouble to the ward. Instead, I have often heard that the hotel was annoyed by the people from outside. I have heard that people were annoyed by the loud noises from the condo when it was under construction. But one thing that hotel can cause could be traffic congestions - cars coming out of the hotel and those coming into the ward could cause traffic congestions. The road is a narrow one. There will be no other problems. Everything else is convenient.

16	Name	U Kyi Soe	
	Age	43	
	Business	Research and Innovation Department	
	Position	Copier machine Operator	
	Address	A/1, Employees Housing Project, Research and Innovation Department Compound, 7 th Ward, Yankin	
	Phone No.	09 770 541 900	

I am U Kyi Soe, a native of this ward. Our family has 5 members. The Mercure Hotel was formerly called Micasa Hotel. I don't know much about the hotel whether it gives trouble to the people in the surroundings or does not. I have never heard there is having problems with surrounding people. It has been here for a long time peacefully. It has no food shops, spas, or massage parlour to attract people from outside. So there is no problem and I have no suggestions.

17	Name	Daw Tin Tin Aung	
	Age	54	
	Business	Township Development Committee	
	Position	Committee Member (1)	
	Address	Township Development Committee Room 5, Building 242, Yannnyein Lane. 1,6 th Ward, Yankin	
	Phone No.	09 455 723 221	
<p>I am Daw Tin Tin Aung. Committee Member (1) of Yankin Township Development Committee. Our family has 5 members. I know the Mercure Hotel. But not in detail. It has no food shop or no other business that is not allowed by the Development Committee. There has been no one that came to us with complaints about the hotel. There are houses and condos around the hotel. At the time of increasing in number of people in this area, number of cars will also be increased. I am worried that there can be traffic congestions due to incoming cars and outgoing ones. So I would like to suggest that coming and going out cars should be managed well. Waste water discharged from kitchen and guest rooms should also be treated well before it flows into the public drain. Otherwise it could affect people in the surroundings.</p>			

7.2 Findings from social environment and interviews

The immediate vicinity of Mercure Yangon Kaba Aye Hotel and Service Apartment has residential condominiums. Two buildings are in process of construction and not yet occupied. Interviews with the people in the immediate vicinity of the hotel including head monk reveal that Mercure Yangon Kaba Aye has good rapport with them. The followings are the core findings.

Persons form condominium, residential houses, the ward administrator, other officials in the administrative sector and the residents around the project welcomed the project

The residents of the ward are proud of having a hotel of international standards in their ward.

The hotel project gave rise to opening of food shops, stores and mini-markets around it, and the guests and the employees of the hotel become regular customers of those shops

No traffic congestion is found on the road beside the hotel as the security officers of the hotel keep managing the traffic.

Absence of traffic congestion during the special occasions held in the hotel is also due to the monastery and residential houses nearby allowing the cars to park in their compounds.

As the hotel is on the high land, the water from the hotel flows down into the drain easily without blocking the drain.

Residents around the hotel are pleased with the plastic bags, donated to them as part of CSR programme, to help collect household rubbish before disposal. Staff from Mercure Yangon Kaba Aye regularly support and carry out volunteer work by cleaning the compound of nearby monastery which is in lined with one of the operation actions of *The Environmental Compliance Guideline outlines*.

The hotel is not noisy at night-time as it has no KTV or night club; that is to the pleasure of residents around the hotel.

People in the ward like the hotel as it sprays insecticide regularly in the ward however, it is reported that fog and noise generated from spraying equipment could disturb some of the neighbours.

There is no complaint about solid waste, effluent waste, noise and bad smell in neighbourhood.

Comments and Suggestions

Social Impact Assessment team suggest that the hotel should:

- keep watch on the system of waste water disposal so that it is working perfectly;
- manage the movement of traffic on the days of special occasions in the hotel;
- consider of using ultra low volume fogging machine or discuss with neighbours regarding spraying schedule
- prevent fire outbreaks doing rehearsals for fire extinguishing and co-operating with neighboring people;
- work with township administrator, ward administrator, and Hluttaw member in designing CSR plan;
- appoint a public relation manager for a good relationship with people in the surroundings and maintain better relationship with people in authority; pay attention to the voice of the public and keep a complaint box at the hotel.



SECTION 8. ENVIRONMENTAL PROTECTION MEASURES

This section outlines the necessary mitigation measures that will be implemented to reduce or mitigate negative environmental impacts associated with the activities of the project during operation and maintenance phase and decommissioning phase. This section also describes the concise statement on the performance standards and procedures for emergency and contingency plans which are implementing at the Mercure Yangon Kaba Aye Hotel and Service Apartment. The plan comprises 3 major pillars for ensuring safety, security and efficiency of the hotel operation. They are:

Emergency Plan

Standard Security Operating Procedures, and

Crisis management Procedures.

8.1 Impact Mitigation Measures

Operation and maintenance phase

The operation and maintenance of hotel functions do not trigger significant and complex or adverse impacts to the natural environment. Therefore, the project does not need profound long-term investigation to assess adverse impacts in the current phase. However, to address the presenting identified potential impacts during hotel operation and maintenance to acceptable levels, the Mercure Yangon Kaba Aye Hotel and Service Apartment is highly encouraged to adopt mitigation measures discussed in the EMP and its adapting corporate environmental guidelines, emergency and contingency plan at its ultimate level.

Negative Impacts	
	Mitigation Measures
Energy	Conducting periodical energy audit and utilizing energy efficient appliances.
Water	Ensure managing water wastage and conduct instant maintenance to the leak.
Wastewater	Prevent overflowing and inundation in any circumstance. Effluent water quality needs in check periodically either weekly or biweekly.
Solid Waste	Temporary storage facilities are made enough to stockpile daily production. Back up disposal workforce is made ready during municipal collection service disruption.
Air Quality	The ventilation fans installed at the kitchens need to be checked functioning routinely. Connections and joints of exhaust hood are thoroughly connected along the channels.
Traffic Congestion	It is important to provide enough parking spaces. Private traffic management team are set up at entry and exit.
Occupational Health and Safety	Safety training and investigation need to be conducted routinely. Enough PPEs and first aid kit need to be provided within short reach.
Toxic and Hazardous Goods	The stockpile policy for these goods needs to be ensure within restriction limit. Any dubious discrepancy or loss needs to be investigated and recorded.

Community grievance due to 'mosquito fogger'	Usually the mosquito fogger is large and noisy machine. Inform the neighbours before the mosquito fogging operations and convey the message that the concentrations of insecticide in the fog is small and no adverse effects on people who are occasionally exposed to the fog.
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Recommended mitigation measures for decommissioning phase

Potential Impact	Proposed Management Objectives/Mitigation Measures
Dust and Exhaust Emissions	<p>Strict enforcement of onsite speed controls as well as limiting unnecessary traffic within the demolition site;</p> <ul style="list-style-type: none"> • Demolition site will be fenced off using tarpaulins; • Friable loads of construction debris being transported must be watered to reduce dust; • All areas disturbed during closure of the site that are not required for a specific activity must be re- vegetated; • Diesel exhaust emissions from heavy machinery on site (excavators, front end loaders and hauling trucks) must be controlled and minimized by regular checks and servicing of vehicles. Any construction vehicle found to be emitting excessive smoke should be withdrawn from the operations and accorded the necessary mechanical attention before it can continue.
Soil contamination due to - Solid Waste Generation	<p>All solid waste to be collected at a central location, and be stored temporarily until removal by a licensed solid waste handler;</p> <ul style="list-style-type: none"> • Contractor should adopt the method of selective demolition as far as practicable to enable the removal of wastes of the same category one at a time thus facilitating recycling of wastes for beneficial reuse and minimizing the burden on dumpsites; • No dumping within the surrounding area is to be permitted. Where potentially hazardous substances are being disposed of, a chain of custody document should be kept with the environmental register as proof of final disposal. General waste is to be collected by the licensed waste disposal contractor. The frequency of collections should be such that waste containment receptacles do not overflow; • Waste generated at the site should be categorised by the contractor and disposed of in a suitable manner into different waste streams (including general and hazardous waste). Wherever possible recycling should be carried out; • Litter generated by the construction crew must be collected in rubbish bins and disposed of weekly at registered waste disposal sites; • All rubble must be removed from the site to an approved disposal site as approved by the Engineer. Burying rubble on the site is prohibited; • Ensure that no litter, refuse, wastes, rubbish, rubble, debris and builders wastes generated on the premises is placed, dumped or deposited on adjacent/surrounding properties during or after the decommissioning period of the project. These have to be disposed of at dumping site as approved by the YCDC.
Accidental spill	Ensure employees are aware of the procedure for dealing with spills and leaks;

	<ul style="list-style-type: none"> • The source of the spill should be isolated and the spillage contained using sand berms, sandbags, sawdust and/or absorbent material; • The area should be cordoned off and secured; • Notify the relevant authorities of any spills that occur; • Ensure that the necessary materials and equipment for dealing with the spills and leaks is available on site at all times.
Excessive noise and vibration pollution	<p>Construction machinery shall be kept in good condition e.g. greasing to reduce noise generation from friction of movable parts;</p> <ul style="list-style-type: none"> • Generators and heavy duty equipment be insulated or placed in enclosures to minimize noise levels during demolition works; • Ensure that noise & excessive vibration from construction activities are within permissible levels as per the NEQG guidelines, 2015. This includes among others adhering to permissible noise and vibration level.

8.2 Corporate Emergency and Contingency Plans

8.2.1 Emergency Plan

The purpose of the plan is to provide information and protocol for the effective management on incidence/accidence. Complied with practical guidelines and instantaneous communication means, the plan offers to eliminate following disaster related risks and emergencies in promptly manner.

Civil Disorder or Riot

Fire

Explosion

Criminal Offense

Natural Disasters, and

Act of Terrorism

Active emergency committee including all key responsible persons of hotel's organization structure had been set up for intrinsic supervision during state of emergency. 24/7 communication channels were launched which interconnect internal manpower and divisions, plus external group which includes government and public safety and security forces as reinforcement. The plan also asserts guidelines and measure for hotel staffs and guest during emergency. The role and responsibility of the manger from all the departments has been clearly stated. For those who are trapped and at security and safety threats, he evacuation processes and procedures are described. The comprehensive plan of the Mercure Yangon Kaba Aye Hotel and Service Apartment is attached in the appendix 15.

8.2.2 Standard Security Operating Procedures (SOP)

In order to ensure the safety and security issue of both clients (guests) and the hotel employers, the SOP delineate clear assignments and resources make available for safety, security and risk department. The staffs who are taking safety, security and risk elimination must coerce the SOP and are trained regularly for ultimate efficiency and competencies. The four elements in the effective security management are:

Security Personnel

Security Infrastructures

Security Equipment, and

Plan and Implementation Procedure.

The above-mentioned elements are set up in both SOP and departments for ensuring security, safety, service, and environment. The implementation guidelines include comprehensive processes and practices from pre-employment vetting, training, Patrol and controls that security personnel are to practice the SOP in their conducts. Risk consideration included in the SOP covers from trespasser to VIP security and escorting that origin from potential incidence of the external causes.

The existing SOP also aims at firefighting, emergency and evacuation measures. The procedures for controlling fires from both internal and external infringement are promulgated by Hotel Emergency Action Team – HEAT. At least, two fire safety drills are scheduled annually to disseminate hotel's preparedness and action in containing safety and security. In addition, the course of actions to handle threats and disasters management are also carefully outlined in the hotel's SOP. Appendix 16 describes the hotel's applied SOP.

8.2.3 Crisis Management Procedures

Along with the SOP, the Mercure Yangon Kaba Aye Hotel and Service Apartment exercise the crisis management procedures. Validated by the Accor group the procedure is also known as AccorHotels Process to Act in Crises Hazard and Emergencies (APACHE) (appendix 17). The manual includes identifying/classifying crisis in both situation and level in different category. A committee was set up which includes from local to regional management personnel. The decision maker from each department has been clearly designated to deliver orders and monitoring the crisis in all circumstance. The crisis management procedures also contain reporting, registering and evaluating checklists and records lest the crisis happens again in future. For ensuring coordination among different departments updated contacts of internal responsible persons and external emergency numbers are made readily available for the staffs and guests. The complete crisis management procedure is attached in the appendix 17.



SECTION 9. ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN

9.1 Introduction

This chapter outlines Environmental Management and Monitoring Plan (EMP) for the Mercure Yangon Kaba Aye Hotel and Service Apartment project. The objective of this chapter is to help better implementing its existing environmental guidelines made by the Accor group. The discussion and monitoring are prepared and organized in compliance with Myanmar Environmental compliance with Myanmar environmental conservation law (2012) and rules (2014). The rationale of this chapter is to make certain actions by project proponent to demonstrate its business activities are being undertaking responsible and no detrimental to potential receptors. The plan also acts a tool in eliminating potential and residual impacts through proactive and practical approaches.

9.2 Implementation Arrangement

The operation and maintenance of the Mercure Yangon Kaba Aye Hotel and Service Apartment is managed SCCP Prince Co., Ltd. For tackling environmental and its related issues, a team to supervise Health, Safety and Environment (HSE) areas needs to be set up under hotel's organizational structure. This team is given the authority to supervise the implication of its environmental guidelines and enforcements and foster this environmental management and monitoring plan. With closely coordination along with the safety, security and risk department, the HSE team needs to network with its contractors and local authorities in developing its environmental standards in the hotel's business function and collaborate with environmentalists/expertise from both internal taskforce and regulatory bodies outside hotel's organizational structure. In addition, the HSE team make use of the EMP and its present environmental standards for oversee its own activities and of sub-contractor that need to be implement for environmental compliance.

9.3 Environmental Management Plan (EMP)

The environmental parameters that need to be complied with National Environmental Quality (Emission) Guidelines (NEQG) which is enforced by the Environmental Conservation Department (ECD) is stated in the following tables (Table 9.1, 9.3, 9.4, 9.5).

By means of EMP, the obligation for environmental conservation and responsibility of project proponent could be indicated. The plan involves comprehensives mitigation actions for diminishing environmental impacts spring from project operation and maintenance. Furthermore, it also presents key factions that are obliged to take the tasks and legal liabilities to compensate adverse changes made to the environment by most possible remediation efforts. The recommended activities that should be put into the Mercure Yangon Kaba Aye Hotel and Service Apartment are identified in the following EMP on operation and maintenance phase. However, it is not limited only to the proposed management plan, The SCCP Prince Co., Ltd., the sole management of the Mercure Yangon Kaba Aye may further add provisional measures that is in close collaboration and coordination with its contractors and sub-contractors for its ultimate attempts to foster conservation and mitigation measures. The recommended environmental mitigation measures and management plan for rehabilitating to environment is expressed in Table 9.2.

Table 9.1 NEQG Permissible Site Runoff and Wastewater Discharge

Parameter	Unit	Maximum Acceptable Standard
Biochemical Oxygen Demand (B.O.D)	mg/l	50
Chemical Oxygen Demand (C.O.D)	mg/l	250
Oil and Grease	mg/l	10
pH	S.U.	6.0-9.0
Total Coliform Bacteria	CFU/100ml	400
Total Suspended Solid	mg/l	50
Total Nitrogen	mg/l	10
Total Phosphorus	mg/l	2

Table 9.2 Recommended action for impacts mitigation and environmental management plan

Potential Impacts	Sources / Locations (Project Activities)	Recommended Mitigation/Management Measures	Monitoring Requirement and Frequency	Implementation Arrangement	
				Implement	Supervise
Current Project Stage – Operation and Maintenance					
Urban Microclimate	Central HAVC Station Private Outdoor AC Units	Provide enough space for air circulation and located the station at most prevailing wind rose. Adopt heat elimination fittings, materials, decorations and retrofits.	{Ambient Temperature (°F/°C)}		
	Heat Conduction and radiation surfaces (i.e. building Materials and Glass Panels)	Applied reflected roof coating and shading	Urban Heat Island (UHT) dispersion / range}		
	Paved and impermeable surfaces	Install green roofs and walls			
	Waste / Radiated Heat from exhaust	Applied less thermal emitting appliances and equipment.	[Seasonally]		
	Swimming pool	Keep the heat source away from the public places Damp paved and impermeable surface Dispense humidity during peak temperature. Provide with as much ornamental plants and green parking lots as possible			
Ambient Air Quality	Engine and Generator Sets	During the normal operation and maintenance, there will be no significant constant air emissions except from the guest’s automobiles logistical related activities that are also lasting only short-lived.	PM _{2.5} , PM ₁₀ , SO ₂ , CO ₂ , CO, HC Biannually		
	Guest’s automobiles	As long as HAVC system function is in service, the indoor air-pollution is unlikely. But backup ventilators and fans should be installed to counter emergency state.			

Potential Impacts	Sources / Locations (Project Activities)	Recommended Mitigation/Management Measures	Monitoring Requirement and Frequency	Implementation Arrangement	
				Implement	Supervise
	F&B facilities.	Emission from engines and generators sets are temporary. Thus, no mitigation measures required.			
Noise	Engine and Generator Sets HVAC System Inbound vs outbound vehicle movement Outdoor utilities Public Events	No mitigation measures required	Permissible db range Biannually		
Water Consumption	Water supply Networks	Metering water consumption according to type of consumption or uses Reporting water consumption according to hotel activities and services Install alert system for prolong leakage, pipeline burst and per daily consumption in each apartments/room Setup water efficient water supply appurtenances in case of replacement needed. Introduce water reuse plan for gardening, washout and flushing sewer.	m ³ /day Continuously		
Storm Water Quality	Storm drainage inlet/outlet Paved Surface areas	Screen and mesh with smaller openings should be established before storm water are directly discharged into public sewer. Small and temporary underground containment chamber (retention) is highly encouraged to set up to filter silt and detritus carried along surface runoff before final discharged into public drain.	Full physical and solid analysis to storm water recommended by NEQG Annually.		
Wastewater	Wastewater treatment Plant (Effluent)	Set up separate system in treating domestic wastewater and septic waste.	Full effluent standards		

Potential Impacts	Sources / Locations (Project Activities)	Recommended Mitigation/Management Measures	Monitoring Requirement and Frequency	Implementation Arrangement	
				Implement	Supervise
	Domestic sewer Guests rooms Toilets F&B facilities	Daily inspection to the performance and efficiency of wastewater treatment plant and its supporting facilities. Prevent influent overloading and system failure. Prepare emergency and backup model in case of treatment process failure. Ensure odor nuisance of existing wastewater treatment plant. Provide with backup sources (motors and pump) for timely replacement on system failure.	recommended by NEQG Biannually.		
Energy	Electricity Networks	Metering electricity consumption by floor levels, hotel functions, and service types. - opt energy efficient and saving appliance when old appliances need replacement - Conduct periodical energy audit - Install light and occupant sensors along corridors for energy saving - Install timer for scheduling power for night light and decoration devices.	Kwh/day Continuously		
Solids Wastes (wastes in general)	Guest Rooms Offices Kitchens and Restaurants Convenient Stores Common rooms Laundries Logistics areas	Minimize waste production by introducing 3R policy Separate wastes in categories for instant salvaging Wet solid wastes or food wastes are discarded in airtight enclosure and properly neutralized lest occurring nuisance Collection and final disposal are scheduled and well-functioning. Contracting multiple waste collection services for efficient waste management	Tons/day Continuously		
Hazardous and Toxic Substances / wastes	Logistic areas kitchens kitchens	Chemicals substances (all stages) are stored not more than acceptable volume or level.	Kg. / Lit.		

Potential Impacts	Sources / Locations (Project Activities)	Recommended Mitigation/Management Measures	Monitoring Requirement and Frequency	Implementation Arrangement	
				Implement	Supervise
	storerooms storage tank Technical Control rooms	Discard and shipment are supervised more than one person. Enough space is ensured for working and application ergonomic. Goods are confined according to degree of safety, risk and toxicity. Strict Storekeeping practices are applied for each stage of uses. Alternative access road makes available for emergency state. Set up and grant fixed authorized person for admission into storage facilities.	Continuously		
Emergency	All areas	Make fire extinguisher available within reach and validity PPE and First Aid kits are accessible to both hotel employee and clients Inform and distribute emergency procedures and exits on every guest check-in Update routine security and risks records Register frequency of incidents and accidents Evaluate security coverage across all hotel facilities Emergency and safety drill needs to be conducted as scheduled.	Nos. Continuously		
Occupational Health and Safety	All areas	Provide periodical safety training and PPEs to new employee once job commenced Material safety Data Sheets (MSDS) and safety manual are well informed and distributed. Inspect whether applying proper PPE and attires on duty.			

Potential Impacts	Sources / Locations (Project Activities)	Recommended Mitigation/Management Measures	Monitoring Requirement and Frequency	Implementation Arrangement	
				Implement	Supervise
		Proactive health care coverage make available to all employee level. Ensure labor and staff networking for resolving basic needs to the dedicated functions.			
Increased traffic congestion	At Exit gate of Mercure Yangon Kaba Aye Hotel and Service Apartment	Security Officer from the hotel is to control traffic by directing drivers either to pull over or stop to let the vehicles from hotel to drive out ensuring safety. Road humps should be fixed on the Sein Lae May Avenue Street to reduce vehicle speeds around the hotel.			

9.4 National Environmental Quality (Emission) Guideline (NEQG)

In compliance to guidelines procedures of Myanmar Environmental Conservation Act, project proponent has sole obligation to fulfil to manage and contain environmental impacts generated from project activities. Following tables describe major parameters and guidelines that need to be monitored on routine basic by project proponent.

Table 9.3 NEQG's guidelines parameters and limits for effluent wastewater

Parameter	Unit	Maximum Acceptable Concentration Level
Biochemical Oxygen Demand (B.O.D)	mg/l	50
Chemical Oxygen Demand (C.O.D)	mg/l	250
Oil and Grease	mg/l	10
pH	S.U.	6.0-9.0
Total Coliform Bacteria	CFU/100ml	400
Total Suspended Solid	mg/l	50
Total Nitrogen	mg/l	10
Total Phosphorus	mg/l	2

Table 9.4 NEQG's guidelines parameters and limits for ambient air quality standards

Parameter	Averaging Period	Guideline Value ($\mu\text{g}/\text{m}^3$)
Nitrogen dioxide (NO_x)	1-year 1-hour	40
		200
Ozone (O_3)	8-hour daily maximum	100
Particulate matter PM_{10}	1-year 24-hour	20
		50
Particulate matter $\text{PM}_{2.5}$	1-year 24-hour	10
		25
Sulfur dioxide (SO_2)	24-hour	20
	10-minute	500

Table 9.5 NEQG's guidelines for noise level limits

Receptors	Recommended Guidelines Noise Level (dB (A))	
	Day-Time (07:00-22:00 hr)	Night-time (22:00 – 07:00 hr)
Residential, Institutional, Educational Zones	55	45
Industrial and Commercial Zones	70	70

Table 9.6 Monitoring frequency for key environmental compartments (NEQG)

Environmental Qualities	Parameters	Frequency
Water & Wastewater	All applicable major parameters relevant to project stage and activities.	Biannually
Ambient Air Quality	PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , O ₃	Biannually
Noise	dB(A)	Triannually
Occupational Health and Safety	PPEs and Safety facilities	Annually

9.5 Environmental Monitoring Plan

The purpose of environmental monitoring plan is to evaluate mitigated environmental impacts are managed and contained as of suggestive approaches stated in the environmental management plan. The monitoring plan consists of the strategies for ensuring the management efficiencies remain the same along the project's life span. Components of environmental monitoring are;

Baseline monitoring

Impact monitoring, and

Compliance monitoring.

Since project stage of the Mercure Yangon Kaba Aye Hotel and Service Apartment is currently on operation and maintenance phase, the consideration for baseline monitoring can be excluded. Impact monitoring covers examination on the management to the physical, biological, socioeconomic and cultural environment impacts and consequences emerged from the project. Likewise, compliance monitoring aims at inspecting the competencies and adoption to the EMP, policies and standards set by the corporate itself. All components of environmental monitoring require closed collaboration and coordination among the project proponent, experts, administration and regulatory bodies. Table 9.7 summarizes recommended environmental monitoring plan for the project.

Table 9.7 Environmental monitoring plan for the Mercure Yangon Kaba Aye Hotel and Service Apartment

Sr.	Description	Indicators	Method	Location	Schedule
Baseline Monitoring [Not Applicable]					
Impact Monitoring					

Sr.	Description	Indicators	Method	Location	Schedule
Physical Environment					
1	Urban Microclimate	Ambient temperature anomaly	Physical Inspection	Proximity to the building	Seasonally
2	Air Quality	ECD's ambient air qualities	Sampling	Within hotel boundary	Seasonally
3	Water Quality	ECD's surface water qualities	Sampling	Point of water Sources	Monthly
4	Solid Waste	Orderliness, Cleanliness, and odourlessness	Visual inspection	Storage facilities	Daily
5	Wastewater	ECD's effluent water qualities	Sampling	Final outfall sewer	Monthly
5	Hazardous and Toxic Substances	Spills, leaks, dangerously stockpile and stationing	Observation	Within hotel boundary	Daily
6	Soil Sedimentation	soil deposition / accumulation	Observation	Within hotel boundary	Monthly
7	Traffic Density	Congestion / blockage	Visual inspection	Within hotel boundary and its vicinity	Hourly (during rush hours)
Biological Environment					
Socio-economic and Cultural Environment					
8	Health Issues	No. of accidents and casualties.	Recording incidents and accidents rate.	Within hotel boundary	Daily
9	Employment	Job creation and cut	Surveying	Project area	Annually
10	Impact of Women/ Children	Gender proportion	Survey	Within hotel boundary	Annually
11	Indirect / direct economic Benefits	Income status Well-being	Survey	Within hotel boundary	Annually
12	Visual aesthetic	Sight Clearance Attractiveness	Observation	Within hotel boundary and its vicinity	Annually
Compliance Monitoring					
1	Incorporation of IEE recommendations into project operation	YES/NO	Review / Audit / Report issues	ECD	As needed

Sr.	Description	Indicators	Method	Location	Schedule
2	Integration of corporate environmental guidelines	YES/NO	Review / Audit / Report issues	The Accor Management	As needed
3	Implementation of corporate Security and Safety related SOPs	YES/NO	Review / Audit / Report issues	The Mercure Management	As needed
4	Adhering notices and guidelines issued by the authorities	Voluntary / Involuntary	Review / Report issues	Relevant administration Offices	As needed
5	Administration Workshop Participation and Dissemination	Voluntary / Involuntary	Review / Audit / Report issues	Relevant administration Offices	As needed
6	Training and Capacity Building	YES/NO	Acquiring Developing Recruitment	The Accor and The Mercure Offices	Biannually

9.6 Budget allocation for Environmental Monitory Cost (Tentative)

This tentative budget allocation has been prepared by the project proponent – The Mercure Yangon Kaba Aye Hotel and Service Apartment. Monitoring Budget is allocated into 5 key categories as described in Table 9.8.

Table 9.8 Annual environmental monitoring cost

Cat.	Particulars	Nos. Qty. Man.	Rate in MMK	Total in MMK
1	Environmental Department - Management			
2	Consumables Goods and Equipment			
3	Sub-Contractor and Services			
4	Logistics and Operation			
	Total			

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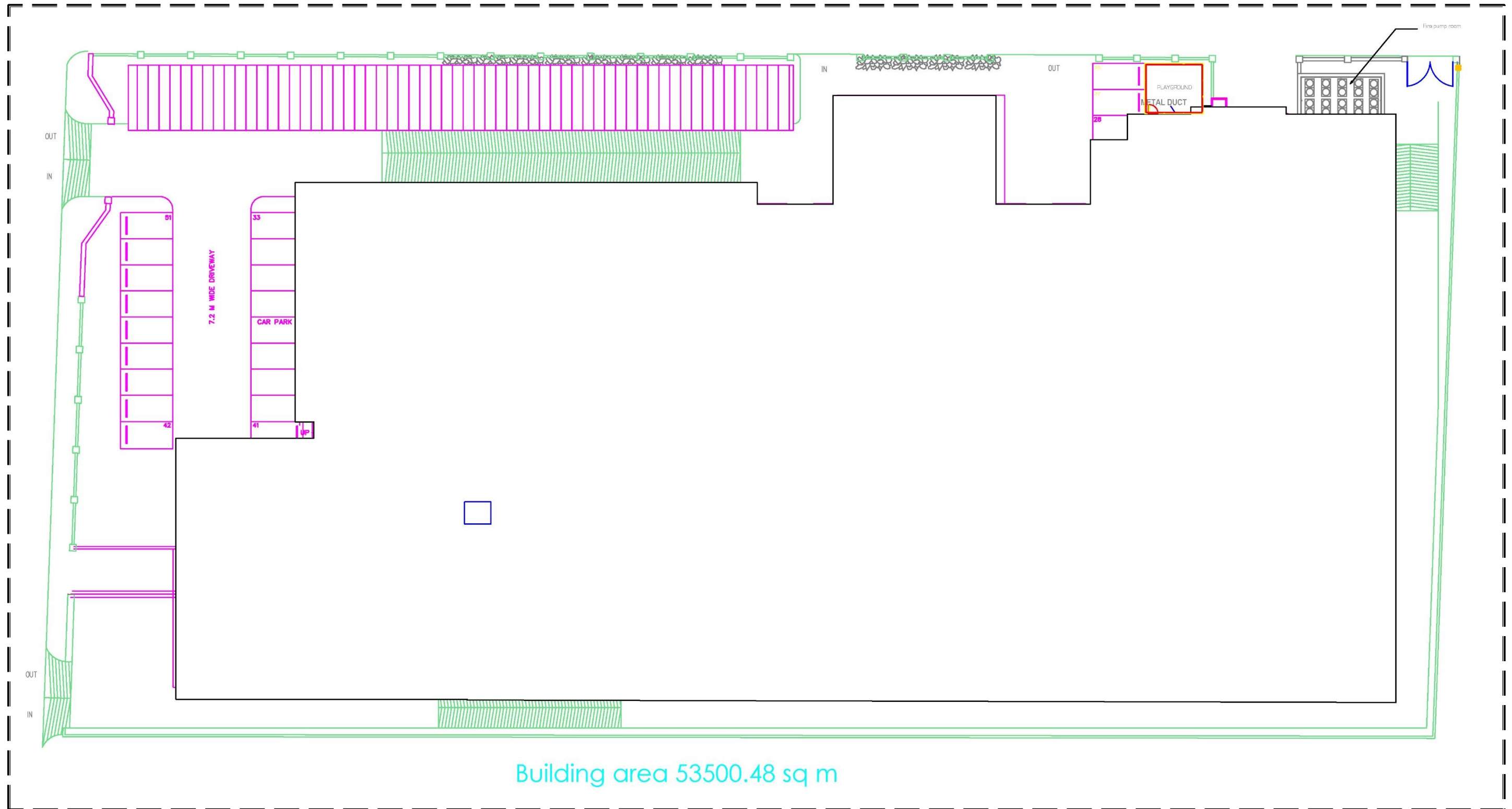
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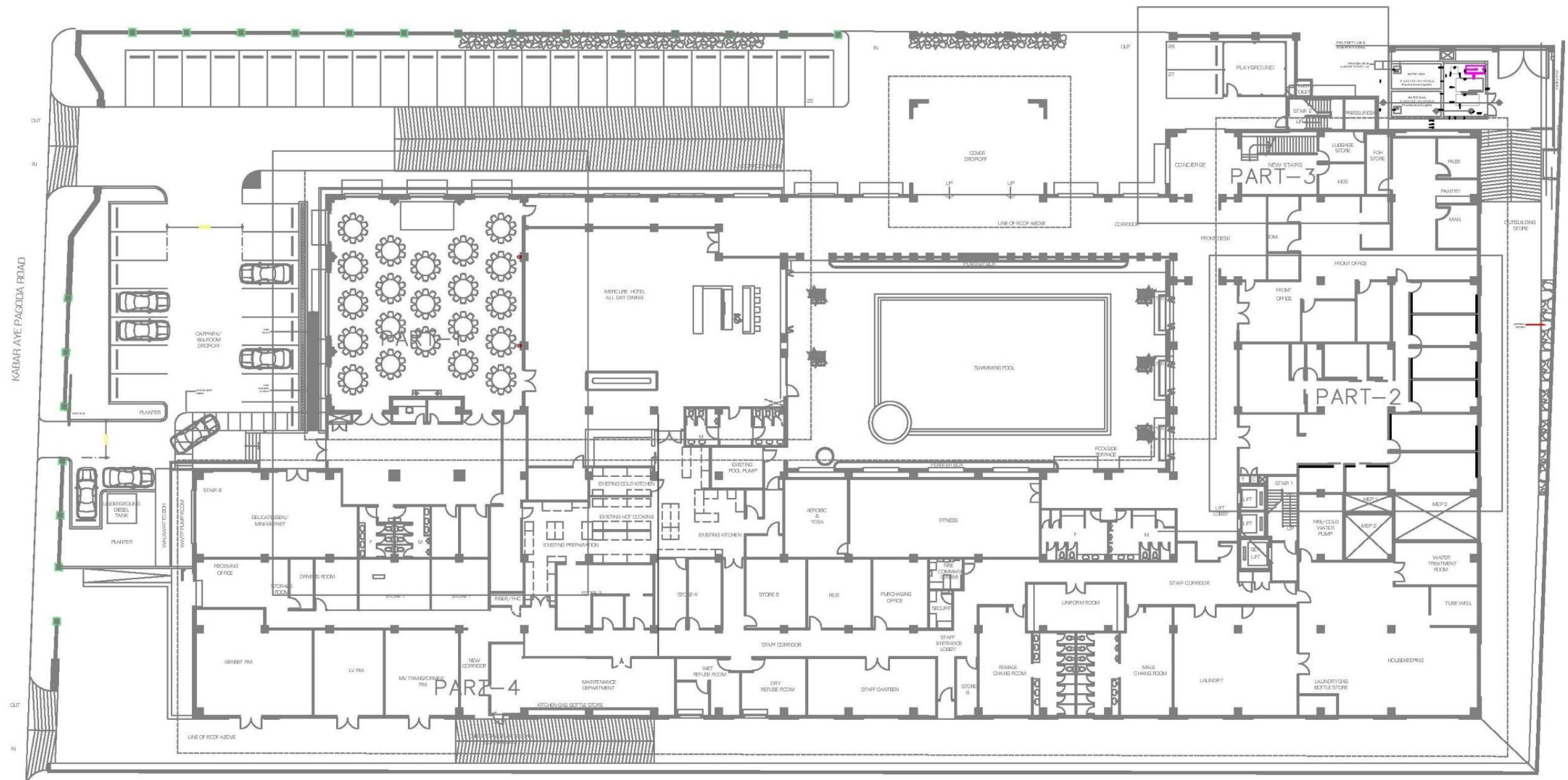
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Appendices

Appendix 1: Site layout plan

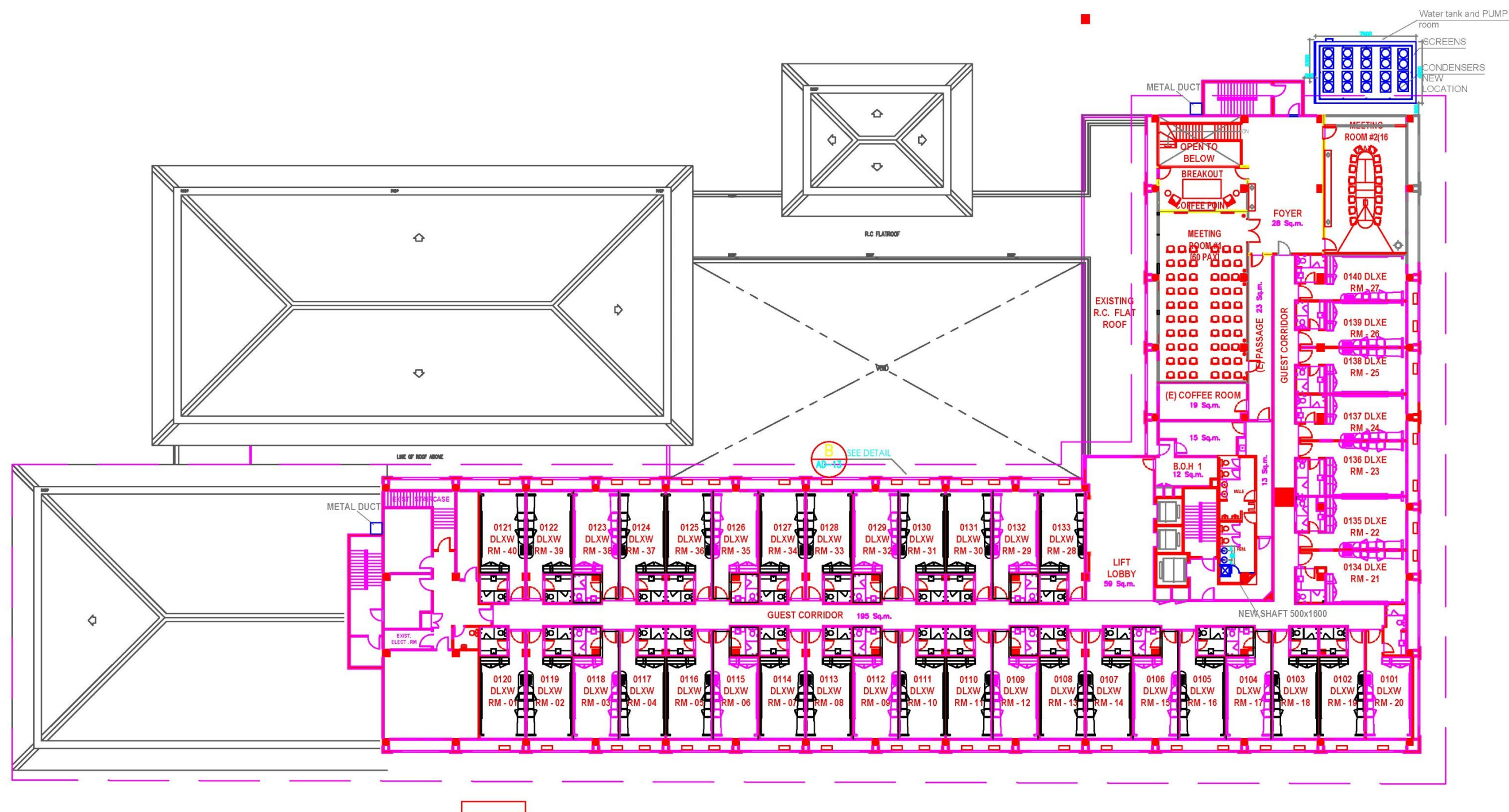


Appendix 2: Floor plan of Ground Floor

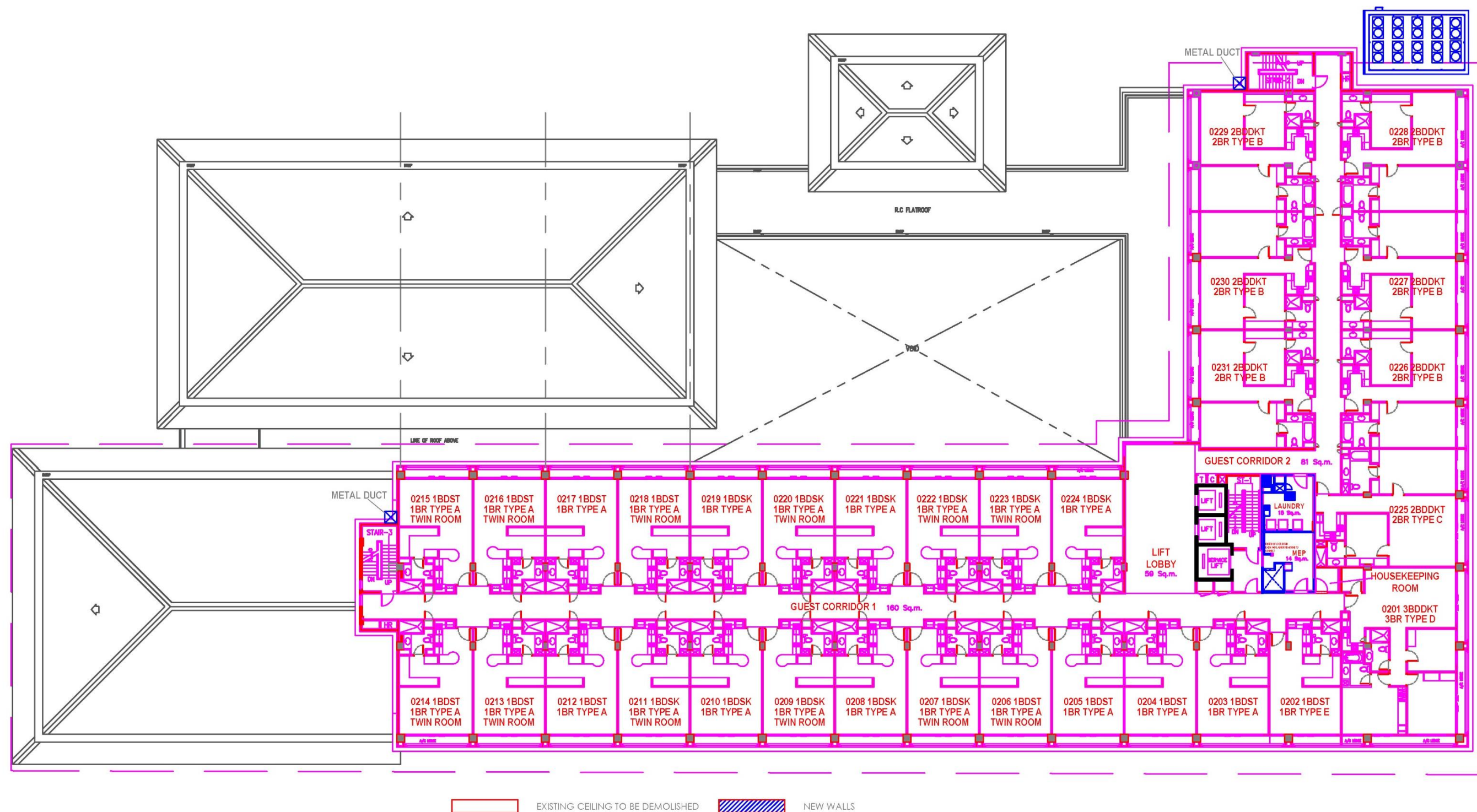


01 GROUND FLOOR PLAN
 A1 = 1:200
 A3 = 1:400

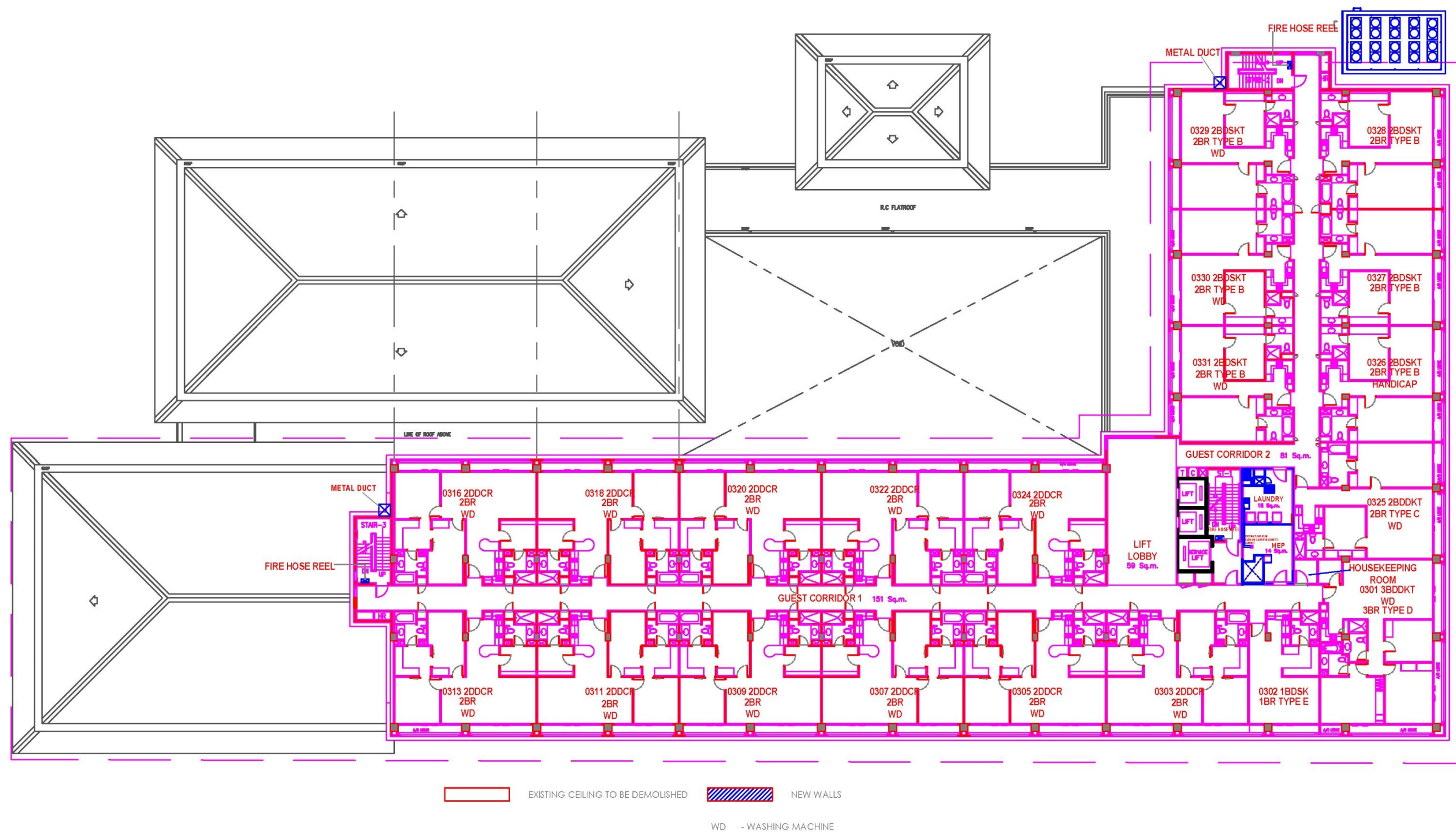
Appendix 3: Floor plan of level 1



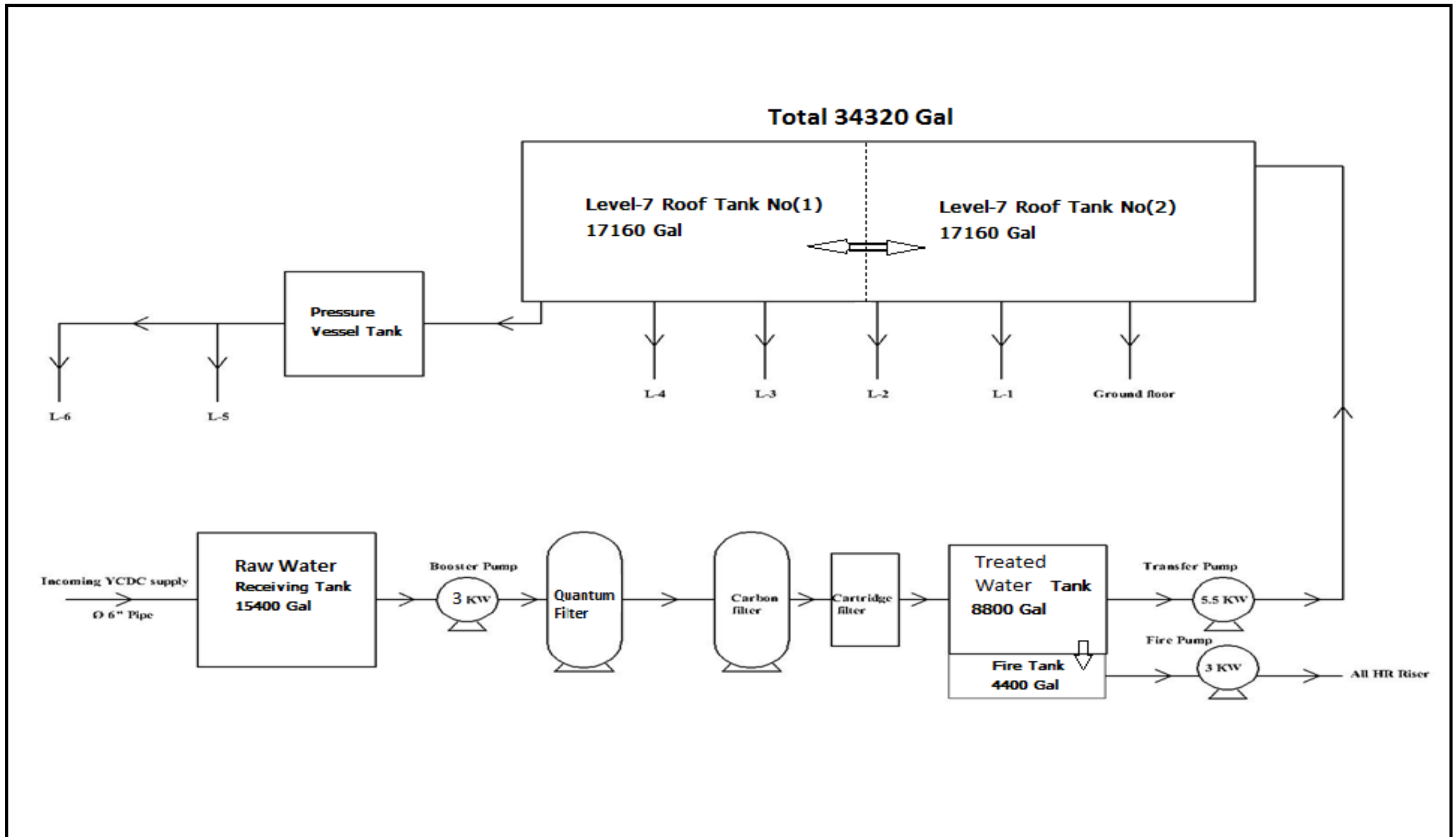
Appendix 4: Floor plan of level 2,4,5,6



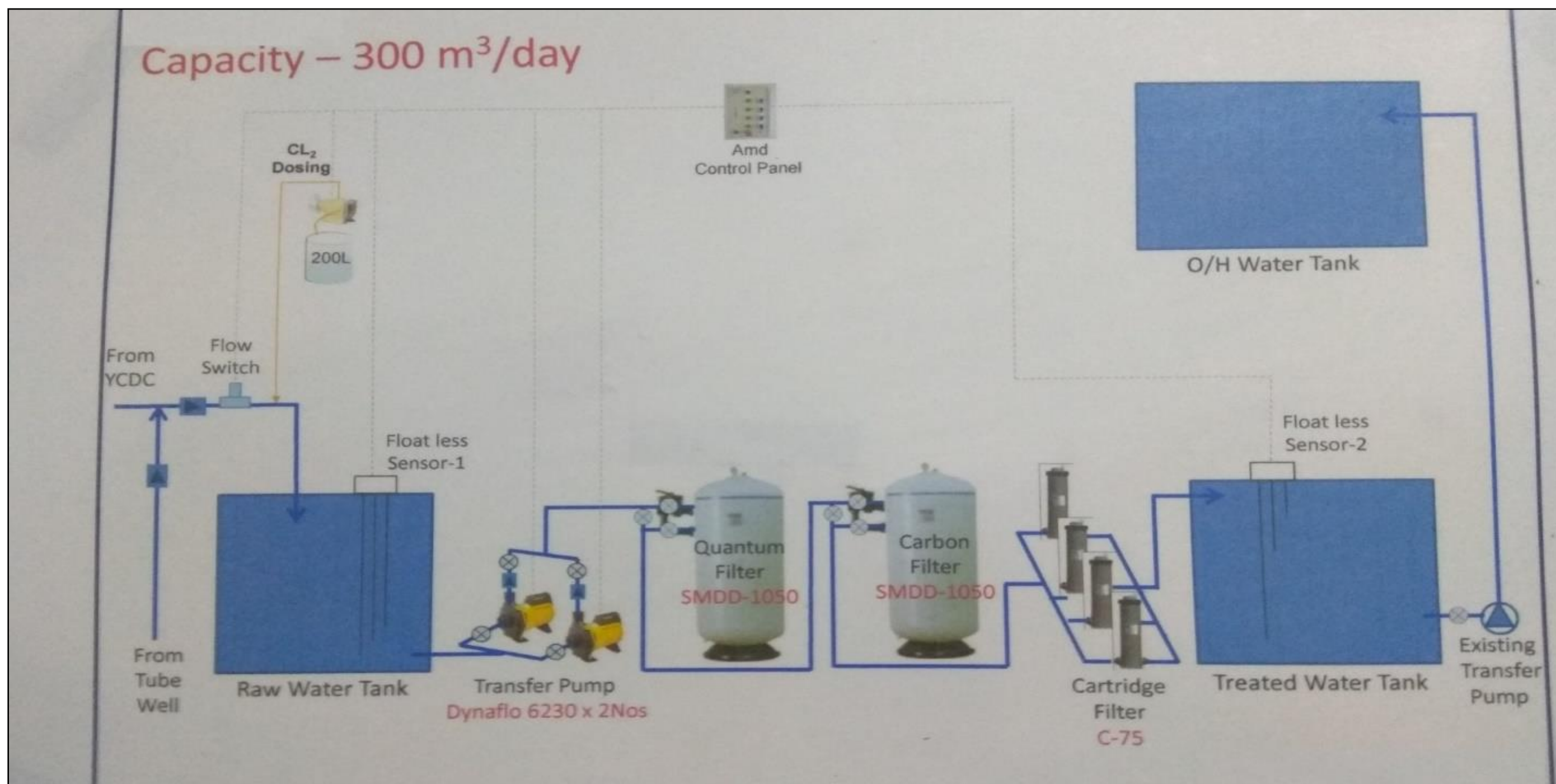
Appendix 5: Floor plan of level 3

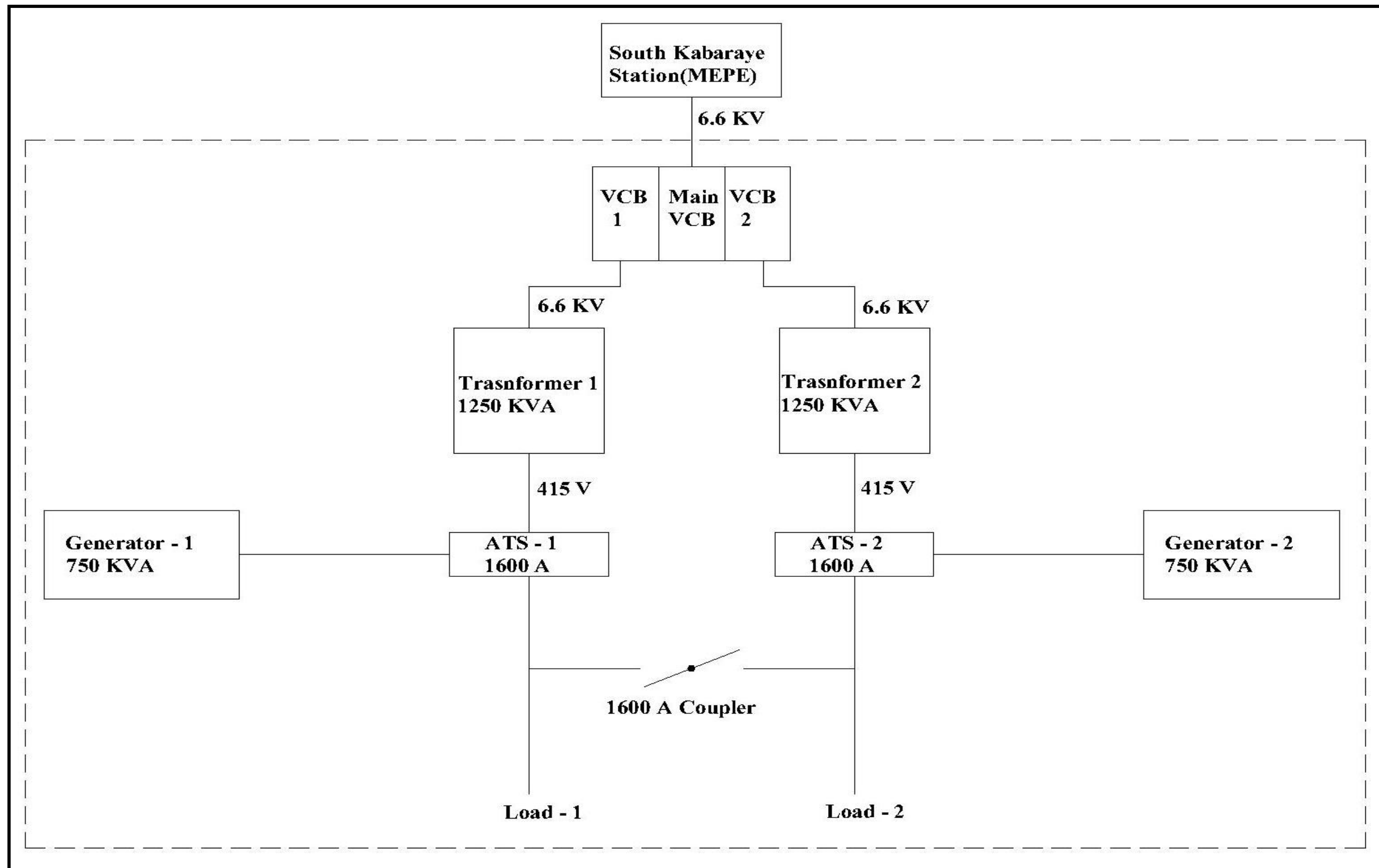


Appendix 7: The Schematic Diagram of Water Supply the Hotel

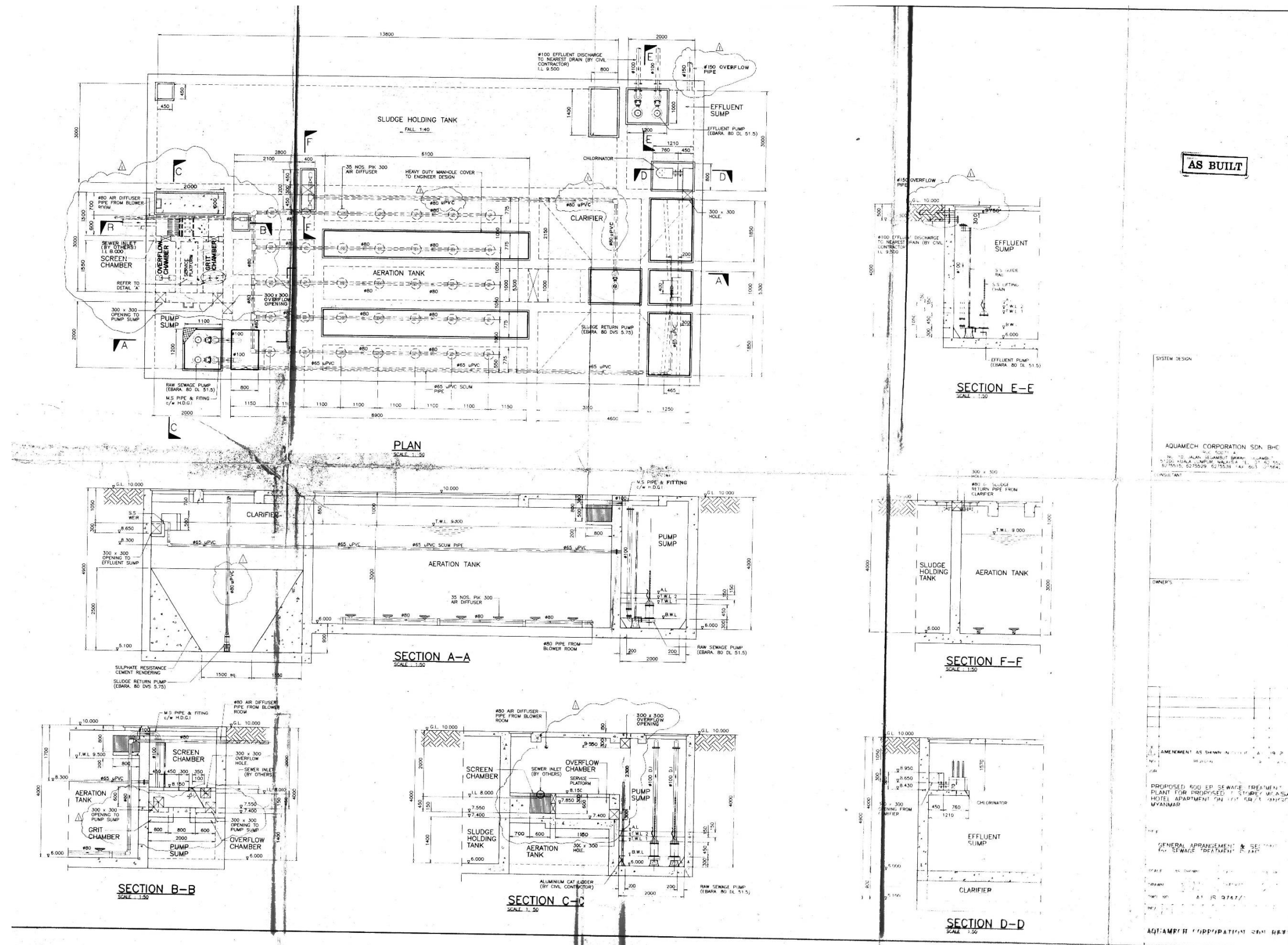


Appendix 8: The Water Treatment System Installed for Domestic Application and Public Hygiene



Appendix 9: The Schematic Diagram of The Energy (Electricity) System

Appendix 10: The schematic diagram of wastewater treatment and disposal



Appendix 11: Environmental Compliance Standards for New and Refurbished Hotels

Environmental Compliance Standards for New and Refurbished Hotels

DESIGN & TECHNICAL SERVICES

ISSUED DATE: 7 MARCH 2019 / REV 1.0

Appendix 12: PHOTOLOG

PHOTOLOG



Photo: Root Tank (2 Nos @ 17160 Gal Each)



Photo: Primary and Backup Power Satation



Photo: Physical Charateristic of Sewer Influent and airproof closure



Photo: Physical Charateristic of Sewer Effluent

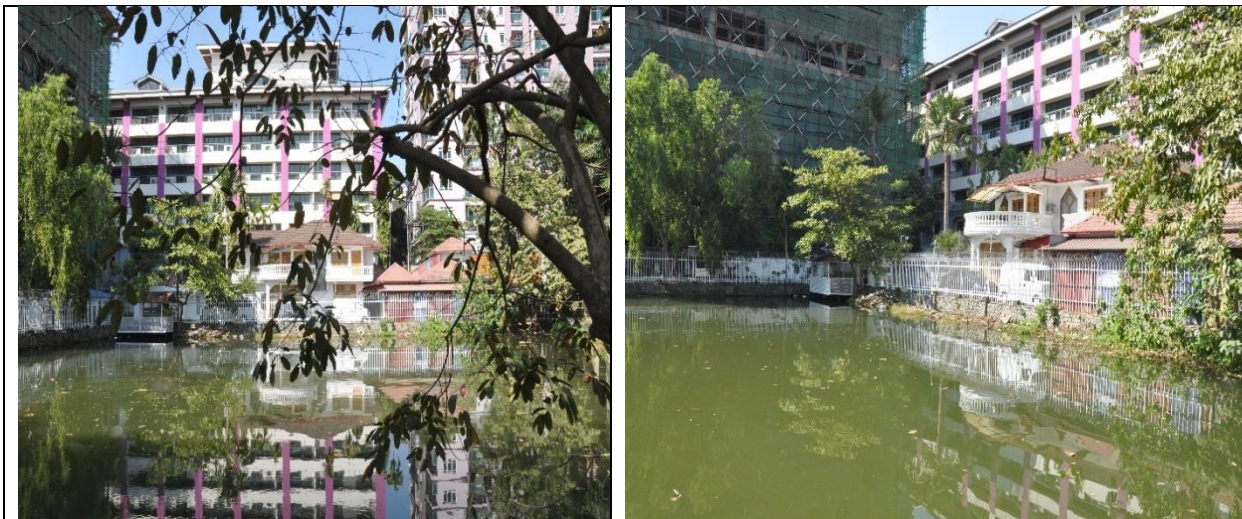


Photo: Nearest Surface Water Body

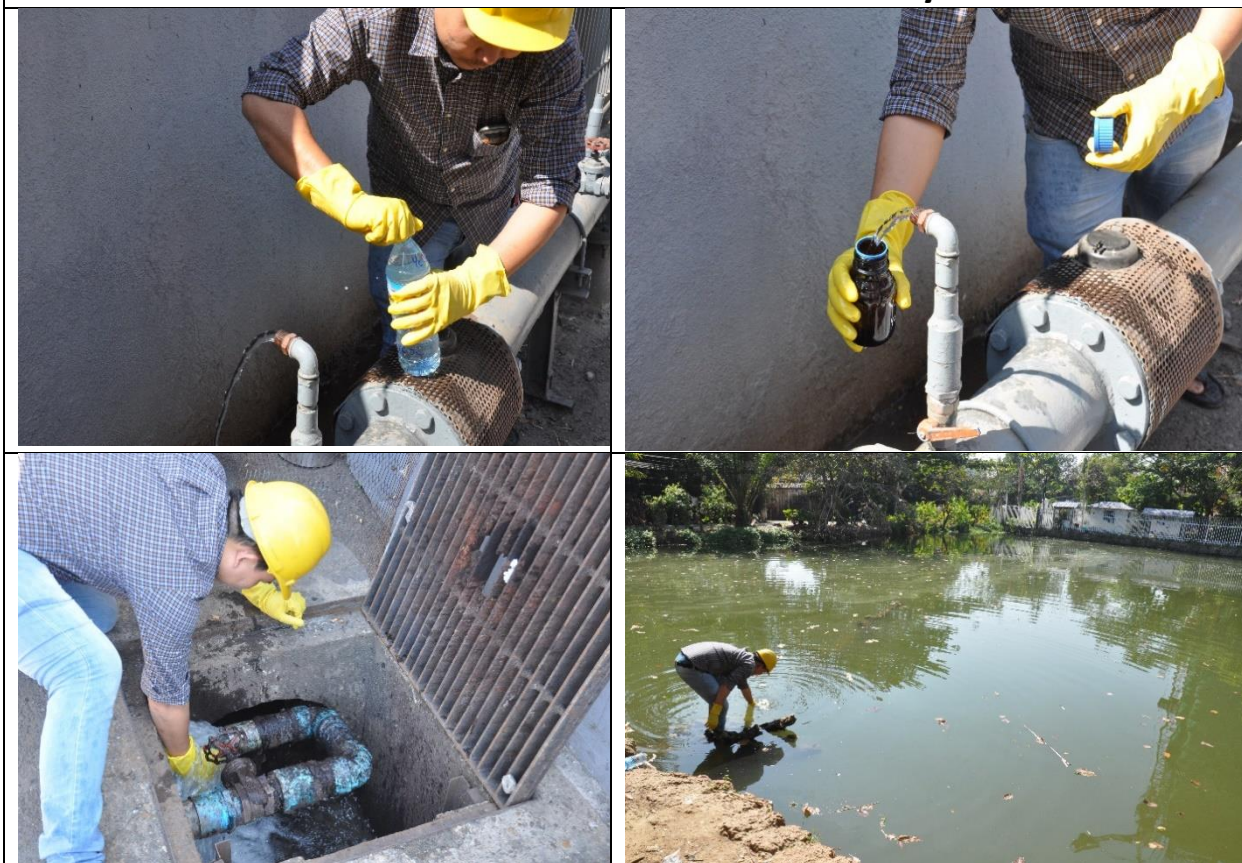





Photo: Water and wasteater Samples for Samplings

Appendix 13: YCDC and Tap Water Quality


SUPREME GROUP OF COMPANIES
 No. 87/88, Bahosi Complex, Bogyoke Aung San Road, Lanmadaw Township, Yangon 11131, Union of Myanmar.
 Tel: (95)-1-2297912/4/5/6/7 E-mail: waterdr@supreme.com.mm
 Fax: (95)-1-229753 Home Page: http://www.supreme.com.mm


DESIGN BASIS

ANNEXE (I)

We have designed Renovation of Existing Water Treatment System (3000 gal/hr) using Filtration Unit for Hotel, based on raw water (tube well) quality and the Treated Water will be on the following data.

Sr.	Parameter	Unit	Raw Water Quality (Tube Well)	Treated Water Quality
1.	pH		5.9	6.7 ± 0.3
2.	Color	TCU		
3.	Turbidity	FTU		
4.	Conductivity	micro mho/cm	220	≤ 350
5.	Total Hardness	ppm as CaCO ₃	40	40
6.	Total Alkalinity	ppm as CaCO ₃	80	≤ 140
7.	Phenolphthalein Alkalinity	ppm as CaCO ₃		
8.	Calcium Hardness	ppm as CaCO ₃		
9.	Iron	ppm	4.4	≤ 0.3
10.	Magnesium Hardness	ppm as CaCO ₃		
11.	Manganese	ppm		
12.	Carbonate	ppm as CaCO ₃		
13.	Chloride	ppm	20	20
14.	Sodium Chloride	ppm		
15.	Bicarbonate	ppm as CaCO ₃		
16.	Sulphate	ppm		
17.	Total Solids	ppm	160	≤ 240
18.	Suspended Solids	ppm		
19.	Dissolved Solids	ppm		
20.	Dissolved Oxygen	ppm		
21.	Silica Dioxide	ppm		
22.	Copper	ppm		

မှတ်ချက် ။ ။ လူကြီးမင်းပေးပို့ခဲ့သောရေကြမ်း (Raw Water) ကို (၂၉. ၃. ၀၆) နေ့တွင် စမ်းသပ်ရရှိခဲ့သည့် အရည်အသွေးပေါ်မူတည်လျက် ရေသန့်စင်မှုစနစ်အား ရွေးချယ်ထားခြင်းဖြစ်ရာ ရရှိလာမည့် သန့်စင်ပြီးရေ (Treated Water) အရည်အသွေးသည် ရွေးချယ်ထားသော ရေသန့်စင်မှုစနစ် မှ ပြုပြင်ပေးနိုင်သည့် ဖော်ပြပါအရည်အသွေးအတိုင်း ရရှိမည်ဖြစ်ပါသည်။


SUPREME WATER DOCTOR GROUP



The Republic of The Union of Myanmar
Ministry of Health and Sports
Department of Medical Services
National Health Laboratory
No.(35),Hmaw Kon Daik Street,Dagon Township,Yangon
Ph : 371957 Fax : 371925

LABORATORY REPORT

WATER CHEMICAL ANALYSIS REPORT

Name : Mercure Hotel Lab. Code No. : 153
Date of Receipt : 21.1.2020 Date of Report : 31.1.2020
Reg: No : 153 Reg: Vol. No : 25
Address : No.17,Kaba Aye Pagoda Road ,Yankin Township
Source of Water : Tap water

Test	Result	Unit	Maximum Permissible Limit
Colour (TCU)	2.00	Pt-Co	20
Turbidity	Nil	NTU	5
Total dissolved solvents (TDS)	40.60	mg/l	1000
Chloride	6.78	mg/l	250
Total hardness (as Ca CO ₃)	50.00	mg/l	500
Iron	0.20	mg/l	1
pH	7.18		6.5-8.5
Sulphate	5.00	mg/l	400
Calcium	10.00	mg/l	200
Magnesium	7.00	mg/l	150
Electrical conductivity	80.30	μs/cm	1500


Remark

Within maximum permissible limit.

Technician


Dr. Swe Setk
Senior Consultant Pathologist
Head of Clinical Pathology
National health Laboratory
Yangon


Appendix 14: Tube Well Water Quality Test Results From Laboratory



**ISO
TECH
LABORATORY**

Laboratory Technical Consultant: U Saw Christopher Maung
B.Sc Engg. (Civil), Dip S.E.(Delft) Lecturer of YIT (Retd). Consultant (Y.C.D.C), LWSE 001.
Former Member (UNICEF, Water quality monitoring & Surveillance Myanmar)





ISO 9001:2015 Cert. No. 688600

WTL-RE-001
Issue Date - 01-12-2012
Effective Date - 01-12-2012
Issue No - 1.0/Page 1 of 2

W0220 097

WATER QUALITY TEST RESULTS FORM

Client MSR - MercureYangon Kabar Aye
 Nature of Water Tube Well Water
 Location No.17, Kabar Aye Pagoda Road, Yankin Township. N - 16°50'24.4", E - 96°09'22.8".
 Date and Time of collection 4.2.2020
 Date and Time of arrival at Laboratory 4.2.2020
 Date and Time of commencing examination 5.2.2020
 Date and Time of completing 7.2.2020

Results of Water Analysis

pH	6.8		6.5 - 8.5
Colour (True)	80	TCU	15 TCU
Turbidity	110	NTU	5 NTU
Conductivity	184	micro S/cm	
Total Hardness	46	mg/l as CaCO ₃	500 mg/l as CaCO ₃
Calcium Hardness		mg/l as CaCO ₃	
Magnesium Hardness		mg/l as CaCO ₃	
Total Alkalinity	100	mg/l as CaCO ₃	
Phenolphthalein Alkalinity		mg/l as CaCO ₃	
Carbonate (CaCO ₃)		mg/l as CaCO ₃	
Bicarbonate (HCO ₃)		mg/l as CaCO ₃	
Iron	4.40	mg/l	0.3 mg/l
Chloride (as CL)	7	mg/l	250 mg/l
Sodium chloride (as NaCL)		mg/l	
Sulphate (as SO ₄)	38	mg/l	500 mg/l
Total Solids		mg/l	1500 mg/l
Total Suspended Solids		mg/l	
Total Dissolved Solids	92	mg/l	1000 mg/l
Manganese		mg/l	0.05 mg/l
Phosphate		mg/l	
Phenolphthalein Acidity		mg/l	
Methyl Orange Acidity		mg/l	
Salinity		ppt	

WHO Drinking Water Guideline (Geneva - 1993)

Remark: This certificate is issued only for the receipt of the test sample.

Tested by
Signature: *Hein*
Name: Zaw Hein Oo
B.Sc (Chemistry)
Sr. Chemist

Approved by
Signature: *See Thit*
Name: B.E (Civil) 1986,
Technical Officer
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Appendix 15: Emergency Plan



EMERGENCY PLAN

JANUARY, 2020

Safety, Security & Risk Department



MERCURE Hotels Yangon Kaba Aye

EMERGENCY / EVACUATION PLAN

1. PURPOSE OF THIS PLAN

This plan has been compiled to provide the Mercure Hotel Management with a practical guideline to emergency communications. its content and format have been developed to meet Mercure specific Communication needs during an emergency.

1.1 Using the plan

The plan provides the Mercure management team with practical guidelines in the following critical areas:

- ❖ How to gain control of an emergency and establish Media Information Centres
- ❖ Roles and responsibilities of the Emergency team
- ❖ Communication with the Media
- ❖ Communication with Authorities
- ❖ Communication with Embassies

The plan also offers action plans for different types of risks in the following broad categories:

- ❖ Disaster-related:
 - Civil disorder or Riot
 - Fire
 - Explosion
 - Act of Murder/Robbery/Arson or other Criminal Activity
 - Natural Disasters
 - Act of Terrorism

2. INTRODUCTION

Emergency defined:

Any situation causes major injury, death, property damage or other significant Problem or may negatively influence Mercure reputation or operation.

The following are identified as potential high risk: -

- Fire –
- Death, Personal Injury Suit –
- Power Outage

Risks of lower probability, but of note:

- Civil Disorder
- Natural Disaster

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- Explosion

All could affect the bottom line and, except for natural disasters, could jeopardize Mercure's reputation.

3. EMERGENCY ACTION COMMITTEE

General Manager	Chairman
Safety, Security & Risk Manager	Vice-chairman
Resident Manager	Secretary
Communication Manager	Spokes person
Front Office Manager	Member
Chief Engineer	Member
Director of Sales	Member
Executive Housekeeper	Member
Executive Chef	Member
Financial Controller	Member

4. COMMUNICATION CENTRE

4.1 The designated Communication Centre is the Business Centre

- During a crisis, this facility will operate a minimum of 12 hours a day, 7 days a week. It should be accessible to team members around the clock
- Required Equipment
- Dedicated telephone lines for all inquiries. This phone must be manned
- Dedicated fax line for incoming faxes
- Dedicated fax line for out-going faxes
- A word processor and printer
- CRISIS STATUS WHITE BOARDS which provide updated information on all crisis management operations. All current planned activities are written on the status board.

4.2 To whom do we communicate?

We need to communicate to every group that may be affected by the emergency to protect their best interests as well as our company's interests. Typical group include:

INTERNAL GROUP

- Owners
- Corporate Office
- Employees/Managers
- Families of employees

EXTERNAL GROUP

- Government officials
- Embassies

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- Police/Fire Service Department/Health Department/Hospital
- In-house guests
- Media
- Hotel/Tourism Ministry

4.3 Who communicates?

During an Emergency, spokespersons should be limited to the minimum. This is to avoid confusion, which could arise if there are too many communicators of information. It is recommended that the General Manager take on the role of spokesperson. In the General Manager's absence, the Resident Manager should act on his behalf.

Other spokespersons may be nominated, as required, by the General Manager, but only to address specific audiences such as in the roles defined below:

<u>INDIVIDUAL</u>	<u>ROLE/RESPONSIBILITY</u>
General Manager	Primary spokesperson, All including Media, Embassies, Decision-maker, Owner Liaison.
Security Manager	Army/Law enforcement authorities
T&C Manager	Labor/Employees
Communication Manager	Media/Embassies

IMPORTANT NOTES:

- The role and responsibilities of designated spokespersons during an Emergency will be determined in consulting with the Emergency Team Leader-General Manager consultation.
- Key messages which each spokesperson will communicate to an assigned target group will be determined by the Emergency Team Leader-General Manager in consulting with the LEGAL Advisor, where necessary.
- If the spokesperson is asked a question which has not been discussed with the legal advisor, then a "let me check the facts; I'll get back to you" response should be given.
- An immediate response to that question should be formulated in conjunction with the Emergency Team Leader -General Manager and Legal Advisor. The spokesperson should respond to the question as soon as possible.

4.4 What do we communicate?

During an Emergency, we ONLY communicate INFORMATION, which has been reviewed and approved by the General Manager, where appropriate. Giving out even a little verified information is preferable to waiting until the complete story with all information is communicated and will focus following areas:

- Description of WHAT HAPPENED
- Description of WHAT CAUSED the Emergency
- Description of WHOM OR WHAT WAS AFFECTED the Emergency. What was the damage? What was the impact? Quality if possible, such as number of people injured, number of employees involved

- Description of WHAT ACTIONS THE COMPANY IS TAKING TO SOLVE THE IMMEDIATE PROBLEM

5. STOCK POLICY

Hotel will store the following stocks for three months.

- Water
- Diesel
- Gas (LPG)
- Food
- Stationery
- Money

Financial Controller will decide on the amount of stocks.

6. STAY IN-HOUSE DURING EMERGENCY

All department heads have to stay in-house. Following staff also should stay in-house during an emergency. .

- All security staff
- All maintenance staff
- Some nominated kitchen staff
- Some nominated staff from others department as necessary

7. EVACUATION TO AIRPORT

If the situation arises to evacuate in-house guests to the airport, we should contact with the relevant embassies for expatriates before we evacuate. We should also contact and request assistance from Embassy, Army Regional Area Commander and Defense Service Intelligence Officer.

- Duty FOAM to print out guest by nationality order and submit to General Manager
- If G.M will decide to evacuate the guest to airport, spoke person will call the key person of relevant embassy. (See appendix A)
- General Manager or Communication Manager will request relevant embassy to provide airplane and to escort their nationalities from Hotel to Airport. Security Manager will inform to Army Area Commander about the situation and request assistant to escort from hotel to airport.

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8. RIOT/CIVIL DISTURBANCE

STAFF RESPONSE

Civil disturbance/riots are uncommon in Yangon and very unlikely to occur in Yangon. However, it is always better to be prepared for any emergency. Thus, in the event where mob/demonstration activity is evident near the hotel, such activity should be immediately report to the Security Department by dialing 152.

COMMITTEE MEMBERS

Obtain the standard format from the Communication Manager to answer queries from guests. If standard format is not yet available, adhere to the following wording.

"Alt incident is taking place in the vicinity of (location). Our Security personnel are now investigating. We will advise you of the situation as soon as possible. However for your own security, please do not leave the premises. Thank you for your cooperation".

Keep a log of the guests who called and follow up once the standard answer is available. Continue to monitor the situation and coordinate until instructed by senior management.

1. SECURITY DEPARTMENT

- Upon receipt of such information, proceed to conduct observation.
- Notify Security Manager
- Notify Police Area commander and report detailed situation.
- Inform the Assistant Manager and Business Center (Communication Center). Brief them on the known circumstances.
- Alert all other Security guards on duty and brief them on the situation.
- Inform telephone operator. Brief them on the known circumstances in order to answer queries from guests.
- Monitor government announcements over the Internet, radio or T.V.
- Open the emergency logs and record the events in chronological order Check the perimeter of the premises and report to the Front Office Assistant Manager of the situation. If required by the Front office Assistant Manager, take the following action:
 - Close the staff entrance .Security guards at gate 1-2 duty to screen staff, workers, visitors and deliveries at roadway leading to staff entrance. Block gates 4-5 with car and barriers.
 - Close loading deck shutters.
 - Double up security assigned to car park duty if possible.
 - Remain in gate 3 to monitor development.
 - Liaise with Security office and keep them informed of the situation and actions taken. Remain in position unless otherwise instructed by the Security Manager.

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- Take in-house guest list from Front office by name and room order for Gate 3 security to concentrate on screening people at gate 3. Allow only legitimate guests/clients entry.

1.1 SECURITY MANAGER

- ❖ Evaluate the situation and recommend an action plan to the General Manager.
- ❖ Dependent on the severity of the situation, the following actions will be considered:
 - If curfew is a possibility, advise local clients accordingly. In- House Guests to be advised not to leave premises within stipulated hours of curfew.
 - Deploy an available staff from other departments to reinforce security.
 - Initiate manpower contingency planning by partially or totally retaining off-duty staff.
Arrange meal and accommodation for all retained staff.
- ❖ Set up a Command Post in the Business Centre. Executive Secretary to man post on hours scheduled by the General Manager.
- ❖ Issue hand-held radios to key personnel.
- ❖ Anticipate problems; work out contingency plans pertinent to situation and present to senior management for approval before implementation.
- ❖ Monitor all incidents and actions/operations with the General Manager.
- ❖ If additional manpower is allocated to security, create schedule for deployment.
- ❖ Keep a close liaison with Police department and other replies for Telephone Operators and Assistant Manager to answer guest queries.
- ❖ Liaison with Public Relations Manager to draft standard replies for Telephone Operators and Assistant Manager to answer guest queries.
- ❖ Incidents of this nature can extend from a few hours to days or even weeks. This should be taken into consideration when formulating the contingency planning.
- ❖ Stand down only upon instruction from the General Manager.

2. FRONT OFFICE DEPARTMENT

2.1 FRONT OFFICE MANAGER

- ❖ On receipt of Riot information, proceed to another designated area for briefing.
- ❖ Instruct Assistant Manager to advise guest accordingly should shuttle services be limited or restricted due to external circumstances. If guests Want to leave advise them of the situation and if they insist on going, remind them to proceed with caution.
- ❖ Obtain standard answer from Public Relations Manager to answer queries From guests.
- ❖ If queries before the standard answer is available try to adhere to the following: "
"An incident is taking place in the vicinity of (location). Our Security Personnel are non' investigating. We will advise you of the situation as soon as possible. However, for your own security, please do not leave the premises. Thank you for your cooperation"
Keep a list of the guests who called and Follow up with calls once to stand Down the standard answer is available.

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- ❖ Brief front office Assistant Managers and staff on the situation. All necessary action is to be implemented with the minimum disruption to normal services.
- ❖ Remind all staff to reflect a calm attitude at the front desk. Be alert in answering queries and remind guests to remain in-house. Always provide reassurance to guests.
- ❖ Instruct one staff to print out an in-house guest list by room number and another one alphabetically for reference when needed.
- ❖ Retain as much off-duty staff as possible to meet any contingency plans.
- ❖ Be alert for other emergencies, which may arise.
- ❖ Continue to monitor situation and to coordinate at all times with management.
- ❖ Remain in position unless otherwise instructed by management to close down office or relocate elsewhere.

2.2 ASSISTANT MANAGER

- ❖ Any reports of mob/riot activity near hotel are to inform to Security immediately.
- ❖ Obtain interim report from Security Supervisor and initiate preliminary Precautions, which include security in all access to the hotel, especially the main entrance.
- ❖ Execute the plan of action as instructed by senior management and coordinate with the Department concerned.
- ❖ Continue to liaise with the command post and to carry out instructions from management.
- ❖ Always be alert for other emergencies, which may arise.

2.3 CONCIERGE

- ❖ Valet parking and shuttle services are to discontinue immediately. 2.
- ❖ All remaining valets parking cars to be moved to employee parking area if necessary.
- ❖ All Hotel vehicles are to be moved to the lobby entrance driveway around Portico area and at least two concierges are to be stationed there to secure the vehicles and communicate with the hotel for any assistance
- ❖ All main entrance staff is to concentrate on securing the front driveway and main entrance, and participate in screening entry to hotel premises.
- ❖ All staff is to be reminded to reflect a calm attitude and to provide reassurance to guests.
- ❖ Coordinate with the command post set on all related matters.

3. TELEPHONE

- ❖ When notified of civil disturbance, Team Leader on duty will brief all Operators of the situation.
- ❖ Remind all staff to reflect a calm attitude in answering queries from guest.
- ❖ Liaise with the Security Manager to initiate group calls for situation briefing if during office hours.
- ❖ Inform management in the following sequence if after office hours;
 - General Manager 09 260 512552
 - Resident Manager 09 430 23856

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- Safety, Security & Risk Manager 09 977 827068
- Chief Engineer 09 431 07466
- Communication Manager
- Director of Sales 09 731 13712
- Executive Chef 09 421168651
- Ex: Housekeeper 09 256 083947
- Front Office Manager 09 253 545302
- T&C Manager 09 5076452

4. (F&B) MECASA RESTAURANT AND KITCHEN

- ❖ In response to an emergency phone call, Department Heads will proceed to the business center or designated area for a situation briefing.
- ❖ Area/location that are identified to vulnerable or that represent a risk will be temporarily shut down. Clients patronizing such areas will be politely invited to outer location/outlet.
- ❖ If a curfew is possibility, advise local patrons accordingly. In-house patrons are to be advised not to leave the premises within the stipulated ours of the curfew.
- ❖ Remind all staff to reflect calm attitude and provide reassurance to guests.
- ❖ Department Heads must work out staff contingency planning as incidents of this nature can extend hours to days or even weeks.
- ❖ Review requirements and arrange to retain off duty staff as necessary.
- ❖ Coordinate with the command post set up at the admin meeting room on all related matters.

5. HOUSEKEEPING DEPARTMBNT

- ❖ In response to an emergency pone call, Executive Housekeeper will proceed to the Business Centre or designated area for a situation briefing.
- ❖ If curfew is instigated, circulate the information and instruct room Attendants to advice the guests to remain within the hotel during stipulated hours of curfew, as it will be unsafe to leave the premises.
- ❖ Remind all staff to reflect calm attitude and provide reassurance to guests.
- ❖ Work out staff contingency planning as incidents of this nature can extend hours to days or even weeks.
- ❖ Review requirements and arrange to retain off duty staff as necessary.
- ❖ Coordinate with the command post set up at the administrative meeting room on all related matters.

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Appendix 16: Standard Security Operating Procedures (SOP)



Safety, Security and Risk Department Standard Security Operating Procedures

Introduction

The people ensure to choose accommodation on safety and security basis when they travel and visit places. Security and safety measures have become the concerns of the world and they are emphasized daily around the world. Security Department Motto is “We will be an alert and proactive team in providing safety and security for all the guests, employees and properties”. They have to get the same treatment each time in our premises. Security will not only consistent team work but also each member taking responsibility by using with SOP. SOP will include all bases, general, internationalize, regionalize, up-dated to develop an effective security procedures for each and every MYGN properties. SOP will improve staff performance, confidence and motivation.

Responsibility

Securities staff must understand all procedures and apply them in their daily operation. Therefore, they should be properly trained regularly, to be an effective preventive security team and let them become familiarized with the procedures and properties. We will achieve our goals and provide a good security service for the guests, staff and properties.

Security Management

There are four elements in the basic effective security management.

- 1. Security Personnel**
For example: Army, Police, Hotel Security, Factory Security, Warehouse Security, Bank Security etc.
- 2. Security Infrastructure**
For example: CCTV, FCC, Access control system,(RFID, Biometric, Keypad, X-ray machine, Body scanner,) etc.
- 3. Security Equipment**
For example: Walkie-talkie, Barriers, Metal detector, Undercarriage mirror, CCTV cameras etc.
- 4. Plan and Procedure**
For example: SOP, Fire Emergency Procedures, Evacuation Plan, Bomb threat Plan etc.

Hotel Security

Hotel Security not only provide security but also safety, service and good environmental sustainable for the guests, employees and properties.

- Security
- Safety
- Service
- Environmental

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Qualification of Hotel Security

Hotel security personnel have good qualifications as following:

- Security Mindful
- Honest
- Smart, Neat and Tidy
- Vigilance, Alert
- Good Observation
- Team-work
- Keep Discipline
- Right Decision
- Politeness, Courtesy

Pre-employment Vetting

As far as security is concerned, all the selected candidates should be checked for their background, criminal records, education and employment history thoroughly before hiring them because hotel has the responsibility for their behavior. It will affect the hotel reputation if they are not honest after appointment. We can check their C.V or neighborhood or police-record.

Training

Training is important to focus on sessions that make a difference in employee's attitude towards safety and security don't just happen: they must be developed, nurtured and synchronized with the other demands on their time and attention. What the staffs do or not do that is impact the security and safety responsibilities of the hotel? Focus on deficiencies in understanding basic security principals, maintaining security awareness and potential problem areas versus the desired knowledge and attunement to security concerns. Regular trainings are following:

1. Security Manager will be conducting basic security and safety knowledge for new staff in orientation training.
2. Security Manager conducts refreshment security, safety and practical fire fighting training for all staff one time in two or three years.
3. Security Manager or Senior Security Supervisor or Security Supervisor will be conducting SOP and practical fire fighting training for all security staff in every year.
4. Security Manager will negotiate with Fire Services Department to conduct advance fire and safety training in suitable time at their head office for all security staffs, maintenance staffs, some F/O staff and some H/K staff.
5. Security Manager or Human Resource Manager will negotiate with Health Department or Myanmar Red Cross Association to conduct CPR and other health knowledge training (Dengue, Bird flu etc.) in suitable time for all staffs.
6. After Fire and Safety Committee Meeting, the committee members will be trained practical fire fighting.

Key Control

Control of key is very important in security department. Guest rooms, offices, stores and other keys that are taken out daily because a lot of valuable items are kept inside the rooms. The guest and hotel properties are at risk if the key is lost, stolen or illegally duplicated. We must control the key strictly.

Guest Room Keys Control

The guest room keys are issued by F/O AM and kept under control at the reception counter:

1. The room keys were issued to registered guests only.
2. Ask for identification before giving a room key. Make sure the patron is indeed a registered guest, and is who he or she claims to be.
3. Remind guests to return their keys when they check out or depart.

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4. If the guest room key is lost, the guest will be fined and a new key card will be replaced.

Floor Master Key (FMK)

These keys are used to open only particular guest floor. Floor housekeeper has access to only guest floors.

Master Key

Master Key was kept by F/O AM for emergency.

Loss of Master Key

The loss / misplace of an grand / floor / section master key is a serious offense and will result in termination of the staff concerned. The procedure for staff will be as follows:

1. Report immediately to F/O AM and security supervisor.
2. AM, together with security supervisor will conduct a search immediately.
3. Whether the key is found or not, GM to be informed immediately, even after office hours.

Open or Ajar Guest Room Doors

Housekeeping, front office, concierge, room service staff, maintenance staff must be sure to pull the doorknob to ensure the door is closed completely before leaving the guest rooms which are vacant or occupied. Security staff will check for unlocked doors during their patrol. Any staff who found any unlocked door is to:

1. Press doorbell and announce your name and department.
2. If the guest is in the room, inform that his door is found unlocked and advise the guest to close the door for his/her safety. Then, report to housekeeping and maintenance to ensure automatic door closer is properly working.
3. If it is an occupied room and the guest is not in the room, inform security and housekeeping after close the door.
4. If it is vacant room, close the door completely and inform security.

Office Key Control

1. Office or respective section keys are kept in security office by key list properly and safely.
2. Designated person is authorized to draw respective section keys from security. He/she fill up in the key issue form his/her name, date, time, sign etc.
3. Security confirms the record to issue the key and sign in the key issue form, and follow up to return it to security office before next day.
4. If the staff recognizes that the key is brought home, he will be sent to security office immediately.
5. If the key is damaged or broken, security can make a duplicate.
6. If the key is lost, the staff will investigate and take an action according to GM's instruction, as well as replace a new lock immediately.
7. Securities do not issue the key to outsider.

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Envelop Key and Emergency requisition after closing hour

1. Store personnel to keep keys in a sealed envelop with a quantity of keys recorded and hand over to security by key issue record form at closing time of store and lock completely. Other critical areas keys are kept in security the same way (e.g. Bar key, cashier counter key etc.). They can take it out before their duty next day from security office.
2. Securities staff receive key issue form and keep it in security office envelop.
3. Securities report to EOD when they need to use an envelop key in emergency situation.
4. Securities can use an envelop key with F/O AM by authority of EOD in emergency situation and sign on envelop, also take note in security log.
5. Securities inform store personnel about emergency opening when he starts his duty next day.

Access Control

One important element in security operation is an Access Control. Not only the fences and gates are strong and high but also sufficient lighting are very important at nighttime. Security must have complete procedures for watching suspicious person who will do criminals act or steal on hotel premises. Also securities always keep an eye with a good vigilance to prevent our guest, staff and properties.

Guest room floors and back of the house areas should be prohibited from entering and loitering unauthorized person. Therefore, most of the critical area such as lobby, guest floors, elevators, stairs, car park, function rooms and restaurant area were being monitored by CCTV cameras.

Employee Access Control

1. Employee must come in and out from employee entrance only.
2. Employee is checked by the security personnel every entering and outgoing.
3. Employee is not allowed to enter unless on duty except by authority of the manager.
4. Employee does not locate in other place except his/her duty area.
5. Employee was not allowed to go outside during duty hours without permission of manager.
6. Employee will report to security if they bring personnel belongings or valuable items into the hotel and must use declaration form.
7. Employee will report to security if they take out the hotel property by permission of DH they must use security gate pass form.
8. Employee can take the rest in the staff lounge on level (1) by permission of DH and have to keep rule and regulation of the HR.

Visitor Access Control

There are three kinds of visitors in and out in the hotel:

1. Management's visitor who visit GM, RM, DOFB, FOM, T&C etc.
2. Employee's visitor who visit an employee.
3. Suppliers

Security personnel follow up visitor access control as following:

1. Management's visitor is allowed to meet after getting confirmation from the management who wants to meet this visitor.
2. Security informs concern department supervisor for an employee's visitor and employee will meet with the visitor at limited area (near receiving area) only according to permission of supervisor.
3. Receiving staff will be receiving the things at receiving area only. Supplier is just allowed to take the money from account department or other necessary.
4. Security issue a visitor card after registration in visitor record form.

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5. The visitor to wear visitor card all time in hotel premises.
6. Security check visitor when they enter and go out.

Contractor Access Control

1. The contractor must be reported with work permit form before they work in hotel premises.
2. Security will issue contractor card before getting their ID card and register in the contractor record.
3. The contractor to wear contractor card all time in hotel premises.
4. They have to work only their working area, not allow to going other place.
5. Security must be check stand by when they work in the guest room.
6. Securities check the contractor when they enter and go out.

Guest Room Maid Access Control

1. Securities keep their profile and acknowledge signature that they will take an action if the guest's property or hotel property will be lost by them.
2. Security issue room maid card and record when they enter and go out.
3. They use only staff entrance and security check when they entering and out going.
4. They have to work their guest room only, not allow to going other place.
5. Visitor, contractor and guest room maid are going to Assembly Area (1) (Muster Point) at the gate (1) when we do evacuation.

Patrol Procedures

Patrolling is passing regularly along at specific route. It has two primary goals in mind for deterrence and detection by a good observation. Guest floors patrol should be a routine duty of security department.

Patrol security to check following:

1. Security patrol one hour by one hour except meal time used by patrol detector.
2. Security patrol routing is level 7 to ground floor and perimeters.
3. All corridors have adequate lighting that ensures the safety and protection of the guests and employees.
4. Ensure that smoke detectors, emergency light, exit light, fire extinguisher and other fire fighting equipments are properly intact.
5. Ensure no hazards or obstructions in hallways, stairwells and exits. Anything, which might be contributed to loss or damage to a personal property or injury to a person. Remove it promptly notify the appropriate department. Don't assume someone else will do it.
6. Doors to storerooms, housekeeping closets, and electrical and communication panels are closed, secured and locked. If found that guest room ajar, the patrol security should identify himself and advise guest to close the door for his safety. If the guest is not in the room, he is to check and inspect the room from outside and close it, inform to F/O AM and security supervisor who record it in security log.
7. Look out for undesirable or suspicious characters on floors. If someone was found loitering on the guest floor, politely ask him/her whether he /she is a guest (ask for guest room key). If he /she comes to see a guest with guest appointment to direct and help. If he/she could not give a good reason, politely ask them to leave escorting them off the property if necessary, to call them into the security office and investigate thoroughly. Then, warn them for trespassing and record in notice file. If they do bad thing (thief or brake-in), they will be sent to police station according to RM's instruction.
8. Ensure that housekeeping trolley, room service trolley or maintenance equipments are not block at the corridors, exit ways and stairs.
9. Patrol security check all things are good in order. If not, record and inform to the concerned department to take an action necessary
10. Check other areas, parking lots, pool, fences and gates, and any special notice signs.
11. Check and record any movement of employee, contractor and room maid at guest floors.

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12. Check slippery things such as water, oil, ice and piece of broken glass for safety.
13. Record anything in security log book.

Car Park Procedures

Security personnel will be stationed at the front driveway to prevent accident and any loss 24 hours a day. He will follow up following procedures:

1. Ensure all incoming and outgoing cars are followed-up according to the traffic safety regulations.
2. Ensure all cars are parked properly and do not obstruct the traffic of the car park.
3. Ensure no valuables are visible through windows that will be attracted for theft.
4. Make random check at cars to ensure it is properly secured.
5. Driveway and car park area need to be clean. If not, inform to housekeeping to clean up.
6. To be aware and familiar with in-house guests and cars they will park under roof if possible.
7. Ensure some parking lots are reserved for VIP and guest's requisition according to security manager instruction.
8. Ensure that no touting, loitering are permitted.
9. No stranger at the parking area for safety.
10. To alert bomb threat all car park areas.
11. To check with F/O AM if a car doesn't move within two or three days.
12. To help and direct the guest to reception counter, function room, Sweat Club and Tapas.
13. The drivers are not allowed gambling and alcohol in hotel premises.
14. Not allow to park outside cars in hotel premises.
15. Night shift supervisor to check and record all over night parked cars. If he found any damage or missing, inform to the guest through F/O AM.
16. Night shift supervisor to check all over night parked cars by bomb search mirror for bomb threat.
17. Taxi not allow to park in hotel premises. If they park on the Kabaaye Pagoda road, security will record for hotel safety.
18. If the guest take the taxi, security take note the taxi's plate number for the guest safety.
19. To report to security supervisor of any special events or incidents at the car park.
20. Security supervisor will liaise to get assistance of traffic police for big function to control smooth traffic.

Trespasser and Unwanted Visitor

Trespasser

The stranger, vendor, alms, beggar are checked and prohibited for their behavior in hotel premises. Security personnel take note and record them in trespasser form with their acknowledge signature. If they don't obey, they will be sent to police station according to RM's instruction.

Unwanted Visitor

Sometimes, the visitor will be taken note as unwanted visitor according to their behavior and action. They are lady joiner, over drunkard, disturbing other guest, destroy hotel property or image and broken the criminal and civil laws. Security personnel check and handle them as following:

1. To get NRC card from lady joiner who was registered detail in lady joiner register book.
2. To take a photo record.
3. Check the lady joiner when they entering and out going.
4. If found valuable things or too much cash, security personnel ask to the guest it is giving to her.
5. Not allow under-age lady joiner (less than sixteen years).

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6. If the guest who don't want to give their lady joiner's NRC card or taking the photo record, the guest can use responsibility form at the reception counter to take responsibility for her.
7. Not allow to the guest who want to use birthday party or gambling or narcotic drugs in the guest room with a lot of people.
8. To solve the problem smoothly according to the RM or EOD's instruction.
9. If necessary, to get the helping of the police according to the RM or EOD's instruction.

Break In, Robbery & Death Case

Break In

The stranger, the person who pretend like the guest, the guest, an employee, contractor and room maid are can be break into the guest room. That can be committed murder or rape case or robbery. That's why; security personnel keep in eye as following:

1. Security must be monitor everybody movement by CCTV cameras in control room.
2. An employee, contractor and room maid were limited their working area.
3. If security finds any suspect person, go and take an action necessary by the team.
4. If necessary, security can report to the police according to RM's instruction.
5. We will keep in mind safety for the guest, staff and others.

Robbery & Hostage

The hotel lobby is open type and closely with public road. Also some Local guests stay in the hotel. The stranger can enter easily to commit robbery and hostage the hotel or guest.

1. Lobby security must be checked everybody entering and outgoing, also office security alert suspect things in CCTV monitors.
2. Patrol security check to ensure the guest rooms are closing properly. If not, he will request the guest to close the door.
3. F/O AM lock the cash drawer that nobody can not see the cash easily.
4. If robbery and hostage occur in the hotel, the security will handle softly for our guest and staff safety because they will bring weapons with them. Do not act the hero.
5. Security must take note their manpower, car plate No. and brand, face and feature, behavior, wearing, speaking, elucidated records (scare or tattoo), incoming way and outgoing way that report to the police immediately who can follow up easily.

Death Case

The guest can be died by murderer or his /her health in the hotel. If the security gets information about the guest die in the room. The security will handle following:

1. Security report immediately to security manager and GM when he gets information that one guest die in the room.
2. Security call an ambulance and confirm death or not by a doctor.
3. If not death yet, sand to hospital by an ambulance. If death, report to police immediately.
4. One security and front office staff stands by outside the room by locked before police arriving.
5. Contact to the guest's family or relation or staff. If the guest is foreigner, contact to his/her embassy.
6. Don't touch the body and any properties without approval of the police.
7. The body was carried out with police approval that used by service elevator and back of way.
8. Security stands by at the room by double locked before police investigation is not complete yet.
9. Security will assist to authorities (police, doctor, immigration, embassy and insurance) for necessary.

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10. The death guest's belongings were handed over to his/her family or relation or staff or embassy properly and one copy of the list keeps in security record.
11. Housekeeping can clean after complete of police investigation.
12. Securities don't panic and handle that anybody doesn't know about the case.
13. Security Manager checks post-mortem with police officer and to get cause of death from Criminal Doctor.

Lost Prevention

There are three lost cases can occur in the hotel they are guest's property lost case, staff's property lost case and hotel's property lost case. Staff, room made, lady joiner, contractor and visitor might be accused in lost cases. Security must be controlled them properly used by SOP.

There are two elements in every lost case; they are tangibles (e.g. cash, gold, jewels, camera, TV etc.) and intangibles (e.g. information, reputation, image, password, financial statistics, confidential documents etc.). Intangibles lost case is more affected than tangibles lost case. Security must be followed up following procedures:

1. Staff was not allowed to come without duty except manager's authority.
2. Staff/visitor/contractor/room maid work at their working area only, not allow to going other place.
3. Staff will meet their visitor at receiving area only.
4. Store room, computer room, financial room and all confidential documents cabinet must be locked properly, don't touch an authorized person.
5. Security check staff/visitor/contractor/room maid when they entering and outgoing.
6. Security use gate pass and declaration form when staff/visitor/contractor/room maid take out hotel/guest properties and bring their belonging in the hotel.
7. Securities always check the movement of staff/visitor/contractor/room maid.
8. The staff/visitor/contractor/room maid use their limited entrance only when they entering and outgoing.
9. Security must be closed when the guest room is opening.
10. We use lost and found system properly.
11. Security keep lady joiner controlling procedure.
12. We use the carrot and the stick system.
13. The staffs were educated often to keep discipline and honesty.
14. All gates and fences are good conditions for security and the hotel premise is enough lighting in night time.
15. Security keeps an eye in CCTV monitors.

Security will take an action immediately when the lost case occurs in the hotel. Security will face to the guest using guest name and ask the questions as following:

1. Missing item, brand and value, quality, quantity
2. Where did you last saw the item?
3. When did you last saw the item?
4. When did you know that item was missing?
5. Did you leave the room? What date and time? What date and time you return?
6. Did you have the visitor or housekeeping or room service or laundry service or maintenance staff? Date and time?
7. Do you have a room maid?
8. Did you have a lady joiner?
9. Are you suspicious of anybody? Who? Why?

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10. Are you insuring that missing item? Insurance policy No. and company?
11. Is there any police report?
12. If you agree, may I looking for missing item in the room?

Security investigates all things and people in the lost case. The guest will know progress of security investigation. The case can be closed by the guest's decision. If security can not investigate, report to the police according to the guest requisition.

Lost & Found System

Every staff have a duty when they found an ownerless items in hotel premise, they will keep it at housekeeping department (lost and found department) because housekeeping department found most of the lost and found items. Following are the basic policy of the lost and found items:

1. All lost and found items will be kept in the lost and found department (housekeeping) for six months and valuable for one year.
2. Housekeeping department should key in into the Opera system about the lost and found items on the date.
3. Housekeeping department contact to the guest by his address or email or phone number.
4. Disclaim items will be given to the founder with lost and found gate pass after retention period.
5. Founder must show lost and found gate pass to entrance duty security.
6. Entrance duty security must check items, signature of authority, room No. and date in the lost and found gate pass.
7. Lost and found gate pass must be filed in security gate pass file.

Security Gate Pass

Security have to record all out going hotel properties that are taken out of the hotel either repair, loan or for any other reason.

1. All out going items must have security gate pass, which is signed and approved by the department head concerned.
2. The duplicate of the gate pass will be kept by user department.
3. The original will accompany the items to entrance security who will be checked items, brand, model, quality, quantity, department head's signature and return date and he will sign on the gate pass.
4. Security supervisor will counter check and sign on the gate pass.
5. Security supervisor fill up serial number on the gate pass and file in the gate pass record file.
6. Entrance security checks again items, brand, model, quality, quantity by the gate pass when the items will return. The respective department will sign on the gate pass that the items were received and security will sign that the items were returned.
7. Security supervisor check all gate passes on last date of the month to ensure all suppose to return items to be returned on respective date. If it is not returned the item, send a remind letter to the respective department.
8. If the guests provide something to staff, contractor, lady joiner or room maid, the guest will write a letter for security pass. When security found suspected items at the check point, should be confirmed to the guest who provided this item.

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Declaration Form

All electrical appliance, valuables, excessive cash and tools of staff or visitor or contractor or lady joiner or room maid must be declared in the declaration form when entering the hotel. Security check the items, brand, model, quality, quantity by the declaration form when they entering and out going. Security will detain all items that are not declared in the declaration form when they left the hotel for a week to ensure no one has claimed for the loss.

Lady Joiner Controlling

Some lady joiners involve in the loss case, murder case and bomb threat in the hotel. Security must be controlled them as following:

1. Security receives NRC card of lady joiner and records the register when they enter with the guest.
2. Security send her to the reception counter to contact the guest if they enter without guest.
3. Security requests her to go back if they enter after mid night without guest appointment. We should not contact to the guest who may be sleeping.
4. Security must be checked their bag and took the photo when she left.
5. If the guests provide something her, the guest will write a letter for security pass. When security found suspicious items or cash at the check point, confirm to the guest who provided this item or cash.
6. If the guest is sleeping, security keep this item or cash with the witness of F/O AM. Tomorrow, confirm to the guest and she can claim after confirmation.
7. If the guest who doesn't want security check his lady, he have to sign in responsible form at reception counter that he will responsible anything for her.
8. If the lady joiner attempted to do a bad things (disturbing to others or criminal case), report to the police according to GM or EOD instruction.

Law Enforcement Liaison

Hotel will do consolidate rapport with relevant authorities such as Police, Defense service intelligence, Immigration and Regional government. Because the hotel is a kind of soft target for terrorists and religious extremist to attack their target those who stay or attend the VIP function in the hotel. Hotel security needs to cooperate with the authority to protect hotel and guests.

Only security manger and security supervisor have the authority to liaise with military intelligence, police to deploy for VIP security, to sweep the bomb and police for high ranking government official security or to report the police concerned with crimes against the hotel and property.

VIP Security & Escorting

Hotel provide often accommodation or facility for VIP guest such as government delegation, high ranking government officials, celebrity, high business man, a big boss or other VIP. Security manager establish efficient security plan according to VIP profile and report to RM. Security must be followed up following procedures:

1. Security manager liaise and cooperate with VIP's in-charge of the security and authorities.
2. Security assign outside of the VIP room and floor the whole time.
3. We will reserve one room for VIP.
4. To sweep the bomb in VIP room or function room before using.
5. We arrange direct phone in the room for VIP only.
6. Security inform nearest extinguisher and fire appliance for VIP room.
7. Security inform hotel fire central control system, hotel fire and emergency plan, hotel lay-out plan and structure, escape routes and emergency stairs, escape route for VIP,
8. We need to provide emergency lighting in VIP room.

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9. Security make access control strictly for visitor, supplier and contractor.
10. If possible, no contractor in the hotel during that time and suppliers were limited at the receiving area only. Also staff will be met their visitor at the receiving area.
11. Securities were assigned at the all critical area such as kitchen, lift motor room, generator room, transformer room and petrol tank.
12. Security check car parking and not allow to park beside VIP function room. If necessary, security check with bomb search mirror for bomb threat.
13. Any food was tested by VIP security before eating.
14. Hotel staffs such as security, housekeeping, F&B, F/O were deployed permanently for VIP and they wear special security pass in all time. They keep smart, professional skill, discipline and personal hygiene.
15. An elevator was taken bypass and driven manual by security or maintenance staff for VIP.

Fire Fighting, Emergency and Evacuation

Components of Fire

1. For a fire to start, three things are needed: **HEAT, FUEL & OXYGEN**.
2. Possible **sources of heat**, which could get hot enough to ignite material found in the premises as following:
 - Cooking equipment, hot ducting, flues and filters;
 - Smokers' material, e.g cigarettes, matches and lighters;
 - Electrical, gas or oil-fired heaters (fixed or portable), room heaters;
 - Hot processes, e.g welding by contractors;
 - Faulty or misused electrical equipment;
 - Light fittings and lighting equipment;
 - Hot surfaces and obstruction of equipment ventilation;
 - Central heating boilers;
 - Naked flames, eg, candles or gas or liquid-fuelled open-flame equipment;
 - Flares, fireworks and pyrotechnics; and
 - Arson.
3. **Anything that burns is fuel for a fire**, need to look for the things that will burn reasonably easily and are in enough quantity to provide fuel for a fire or cause it to spread to another fuel source.
4. The main **source of oxygen** for a fire is in the air around us.
5. To extinguish a fire, one thing must be removed in three things.
(e.g – extinguish a fire with water, which removes the heat.)
6. Smoke produced by a fire quickly also contains toxic gases which are more harmful to people than a fire. It is thick and black, obscures vision; causes grate difficulty in breathing and can block escape routes. It effects to trap the people in the building. The smoke will pass through any holes or gaps in the walls, ceiling and floor into other parts of the building.
7. Smoke spread 3-5 meters within one second and level to level within three seconds.
8. The chances of a fire starting will be low if the premises have few ignition sources and combustible materials are kept away from there. In general, fires start in one of three ways:
Accidentally, such as when smoking materials are not properly extinguished or when mobile heaters are knocked over;

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By act or omission, such as when electrical equipment is not properly maintained, or when waste is allowed to accumulate near to a heat source; and

Deliberately, such as an arson attack involving setting fire to external rubbish bins placed too close to the building.

9. Fire is spread by three methods:
 - Convection;
 - Conduction; and
 - Radiation.
10. There are four class of fire:
 - a. Class A; fires involving solid materials such as wood, paper or textiles.
 - b. Class B; fires involving flammable liquids such as petrol, diesel or oils.
 - c. Class C; fires involving gases.
 - d. Class D; fires involving metals, e.g magnesium, sodium which are not in the hotel.

Fire Fighting Equipment

1. Water

- Water sprinkler system.
 - Fire hose reel
 - Fire water pump (Fire Hydrant)
 - Wet and dry riser
- A water do not use in liquid, electrical and metal fire cases.

2. Fire extinguisher

- Dry chemical
(Fight for fire class A, B & C)
- Carbon dioxide
(Fight for fire class B, C, electrical and machinery fire cases.)

3. Other fire equipment

- Smoke Detector
- Heat Detector
- Gas Detector
- Fire Blanket
- Break Glass Unit
- Fire Axes
- Sand Bucket
- Sprinkler system

How To Use a Fire Extinguisher

- Remove the portable fire extinguisher from hook / rack.
- Hold extinguisher by carrying its handle, hold firmly.
- **Pull** out the locking pin, breaking the metal tamper seal.
- Stay approximately 1.5 or 2 meters away from fire; otherwise the force of the discharge may scatter the fire. An outdoor fire should be approached from an upwind position.
- **Aim** the hose / muzzle at the base of fire.
- **Press** the top lever.
(Pull / Aim / press)

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Location of Fire Appliances

1. Fire extinguisher, Fire Hose reel and Break-glass Alarm

- Location near all staircases at all floors.

2. Smoke and Heat Detector

- Location all rooms and corridors in the building.

3. Fire Blanket and Foam extinguisher

- Location in the kitchen.

4. Carbon dioxide Extinguisher

- Portable Carbon dioxide Extinguishers are being located at level 7 LMR, pool pump room, water pump room (in the HK office), Transformer rooms and Generator room.
- Fix installation Carbon dioxide Extinguishers are being located at Transformer rooms and Generator room. Release button is in the Maintenance Office.

Staff Discovering a Fire

- When fire is discovered, go to nearest telephone, call to **“0” for operator or 119 & 152 for security office** and report follow:
 - Identify your name and department.
 - Explain the exact location of fire or smoke.
 - Describe the situation of the fire or smoke, and injury, if any.
 - Don't panic, stay calm.
- If not easy to go to telephone, can press nearest break-glass and sound alarm.
- After report, to put out fire with an extinguisher if possible.
- Use water on paper, textile fabrics, wood fire etc.
- Do not use water on electrical, inflammable liquid and gas fire.
- Use Carbon dioxide Extinguishers for electrical, inflammable liquid and gas fire.
- Leave immediately after discharging your extinguisher for your safety because Carbon dioxide is toxic gas.
- If fire can't be control, be close the door and keep door closed until the arrival of HEAT members .
- Before opening any door in the fire area, check it first. If you see smoke is coming from under the door or the door handle is hot when you touch it that the fire has real and spread, **do not open the door.**
- Stay near the fire area, assist guests and HEAT members who extinguish a fire with fire fighting equipments.

Fire Safety Conduct

- In case of fire, do not use elevators which will be “homing down” to ground level in the event of alarm ringing; use the staircases to assembly area follow the exit arrow.
- Smoke produced by a fire quickly also contains toxic gases which are more harmful to people than fire. It is thick and black; obscures vision, causes grate difficulty in breathing and can block the escape routes it effects can trap the people in the building. Smoke spread 3-5 meters within one second and level to level within three seconds.
- Use smoke cover mask or breathing apparatus.
- Always save life first.
- If injury, do not remove of the victim's clothes and do not use water or blanket.
- Sent to hospital immediately.

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Fire Hazards / Prevention

- Make sure to put plenty of ashtrays in the guest rooms, function room and toilets.
- Empty all ashtrays into commode and sand waste bin; do not throw into plastic waste bin.
- Check for burned spots on sheet, mattress, and carpet. Make sure they're not hot. Report your findings.
- Report immediately any frayed wires, loose connection, broken switches.
- Avoid misuse electrical equipments; make sure to aware how to use it properly.
- Turn off all electrical appliances when not in use.
- No gas leakage.
- Do not smoke in unauthorized areas. Extinguish cigarette ends and matches in proper ashtrays and sand bucket.
- Store flammable liquid in a special cabinet or limited store. Never store it on guest floor.
- To store dividedly flammable things and others.
- Do not block a smoke detector or any other fire appliances and exit doors / ways.
- To request the guest not to use candle or liquid-fuelled open-flame equipment.
- To request the guest not to leave their room while cooking.
- Corridors and staircases that from part of escape routes should be kept clear and hazard free at all time.
- The contractor works were guided in order to sure safety. (eg. Welding, Cutting, drilling etc.)

HEAT (Hotel Emergency Action Team)

HEAT members

- Duty Assistant Manager
- Duty Security Supervisor
- Duty Maintenance Officer
- Duty Housekeeping staff

If receive of fire report, Operator or Security to take down the following:

- Name, position and department
- Location of fire
- Extent of fire

Operator and Security will inform **HEAT** members.

When an alarm bell is ringing, office security must be followed up following procedures;

- Press silence button on FCC panel.
- Read slot No. on FCC panel and look for address of alarm bell ringing in locations book.
- Inform to **HEAT** members immediately used by W.T.
- Inform to front office reception counter and operator who can answer to the guest's inquire about situation.
- Connect to **HEAM** team, F/O AM, operator, management and other department necessary.

HEAT members do that fire information as following:

- Go to location immediately and check the situation together.
- Inform security office the situation through Walkie-talkie.
- Put out the fire together.

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- It is important ensure that, in the event of fire, the rate of fire growth is restricted in its early stage.
- Inform security office if the fire is out.
- Investigate and Report to the GM by fire report form.
- If HEAT members saw no fire in location, inform security office that the information is wrong.
- FCC security will pass all information to operator and Front desk.
- We make an emergency announcement through PA system the whole hotel about situation if an alarm was ringing the whole hotel.
- All **HEAT** members must respond all fire alarms as real fire.
- Security Supervisor investigates about fire case and report to Security Manager and GM.

Fire and Safety Committee

We form Fire and Safety Committee (FSC) every year. Security Manager is Chairperson, Maintenance Manager is Vice-Chairperson, Front Office Manager is Secretary, Communications Manager is Spokesperson, and other departmental senior staff are members. The committee conducts as following;

- The committee meeting will be held two times a year.
- Committee members discuss in the meeting about fire precautions, how to reduce fire risk and how to educate fire knowledge for all staff.
- FSC conduct fire drill and practical fire fighting for all staff after meeting.

Fire Fighting Team

Security manager is a commander and all security and maintenance personnel are the members of fire fighting team. Security Supervisor is a leader of fire fighting team after office hour that he has to get decision from EOD.

Other Disasters

- Cyclone
- Flood
- Earthquake
- Tsunami
- Riot or Violence
- Fatal disease etc.

Security will follow up on the following procedures.

1. Security alert to take an action according to State government and Regional authorities announcement.
1. Security think and act pro-active action as soon as possible.
2. Security follow up according to instruction of the management, security manager and security supervisor.
3. The management arranges to store food, water, petrol, first aid box, stationary and other essentials for one month at least.
4. Security avoid rumors and try to get clear information.
5. Spokesperson of the hotel is Communication Manager. She will deal with media, authority or guest.
6. Security Manager to deal with authorities.
7. Security take care for the guest and staff safety.

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Evacuation

The guest, staff and other person safety is first priority in our premise. Therefore, we will be evacuated at the situation of worse disaster according to GM's decision that can be evacuated not only the whole hotel but also one or two floors depend on the situation. Evacuation announcement will be made through a PA system by F/O staff. We follow up on the following procedures at an evacuation:

1. Security and F/O systematically take out all the guests, staffs, room maids, contractors and visitors to muster points in evacuation. If necessary, Maintenance and Housekeeping cooperate with them.
2. They make a cross mark (X) on the guest room door after the guest outgoing to indicate that doesn't confuse the guest inside or not.
3. Assembly Area (2) near gate (1), (2) for the staff, room maids, contractors and visitors, Assembly Area (1) near concierge counter for the guests and also Assembly Area (3) in front of Marche mini mart for the guest.
4. Do not use elevators, use only nearest emergency route and stair way.
5. Emergency lighting and exit way lighting are good conditions at that time.
6. Security make head account at the muster points according to the guest list, on duty staff list, room maid record, contractor record and visitor record. If not complete, look for and take out again.
7. Security manager is a commander in evacuation who will be commanded directly to the security personnel or other staff in order to achieve smooth and successful evacuation.
8. All are keep going to the safety area from muster points.
9. Special take care for disable person, an older, kid, pregnant woman and abnormal person.
10. Fire drill or evacuation drill was conducted by Fire and Safety Committee two times in a year.

Bomb Threat Procedures

Now a day, there are a lot of conflicts and tensions between each country in the world that the hotels will be targeted by terrorists and a lot of people are death and injury. Bomb explosion is the worst situation of the hotel.

Gunpowder, strong gunpowder, detonator, bomb splinter, battery and clock are in a bomb structure. The gunpowder are C4, TNT etc that 1 lb can be destroyed an aero-plane.

Preventive Procedures

1. Visitor, contractor, staff, supplier and room maid were checked by metal detector when they entering and outgoing. If necessary according to political and other emergency situation, also the guests and their belonging were checked by metal detector.
2. Need to clean hotel premise all time such as empty box, can, bottle and other rubbish.
3. Need to check rubbish bin and don't put it at unnecessary place.
4. Security keeps an eye on CCTV monitors.
5. Security check a background and movement of visitor, contractor, staff, supplier and room maid.

Discovering of Bomb

1. Do not panic, stay calm.
2. Security call to Army bomb sweeping and police immediately.
3. Don't touch and don't move.
4. Covering sand bags and tires.
5. All the people were evacuated by the GM's instruction minimum 50 meters far from it and stay away a glass.
6. The windows, glass doors and other doors must be opened.

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7. Air con; fan and other mechanical instruments must be shut down.
8. Do not use mobile phone and walkie-talkie.
9. Do not gather and look at when a bomb was discovered.
10. Do not spread the rumors.

Bomb Threat by Phone

Do not panic, stay calm, tell with steady and ask following questions:

1. When is the bomb going to explode?
2. Where is the right now?
3. What does it look like?
4. What kind of bomb is it?
5. What will cause it to explode?
6. Did you place the bomb?
7. Why?
8. What is your address?
9. What is your name?

It is also important to take note of the following:

1. The caller's voice and vocal characteristics (e.g. male or female, adult or child);
2. The language used and accent (e.g. local or foreign);
3. The caller's voice is calm, angry, excited, slow, rapid, soft, loud, laughter, crying, normal, distinct, slurred, whispered, nasal, stutter, lisp, raspy, deep, ragged, clearing throat, deep breathing, croaking voice, disguised, accent and familiar. If the voice is familiar, who did it sound like?
4. The calling background sounds are street noises, crockery, voices, PA system, music, house noise, motor, office machinery, machinery, factory machinery, animal noises, clear, static, local, long distance, and other.
5. The caller's language is well spoken (educated), foul, incoherent, taped, message read by threat maker and irrational.

Suspicious Letter or Package

Security checks every letter and package for bomb threat. If security receives suspicious letter or package, follow up following procedures:

1. Handle with care. Don't shake or bump.
2. Isolate it immediately.
3. Don't open, smell, touch, or taste.
4. Treat it as suspect; call Army bomb sweeping and police.

Following are characteristics of suspicious letter or package:

1. No return address.
2. Insufficient postage.
3. Ticking sound
4. Is addressee expecting package/letter? If so, verify contents.
5. Return address and postmark are not from same area.
6. Wrapped in brown paper w/twine.
7. Grease stains or discoloration on paper.
8. Strange odors.
9. Restrictive markings such as Confidential, Personal, etc.

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10. Excessive postage.
11. Hand written or poorly typed address.
12. Incorrect titles
13. Titles but no names.
14. Misspellings of common words.
15. Excessive weight
16. Rigid envelope
17. Lopsided or uneven envelope.
18. Protruding wires or tinfoil.
19. Excessive securing material such as masking tape, string, etc.
20. Visual distractions

Basic Bomb Search Procedures

1. Need to search minimum 20 meters surrounding of the hotel.
2. Need to search air-con ducts, false ceilings, speaker systems, fire fighting equipments etc.
3. Need to search public toilet, rest room, canteen, staircase and rubbish bin.
4. Need to search ground floor to upper floor.
5. The staff should be search in their familiar working area.
6. Move to various parts of the search area and listen for any unusual sound.
7. Conduct a systematic search through the area, with at least three sweeps:
 - a) 1st sweep: items at hip height and below (on desks and tables)
 - b) 2nd sweep: items resting on floor items at hip-to-head height.
 - c) 3rd sweep: items above head-height.
8. Have a standard sign or marker to indicate search is completed at that area.

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Appendix 17: Crisis Management Procedures



Safety, Security & Risk Department **Crisis Management Procedures**

Purpose of this procedure

Any incident or accident that disrupts the smooth running of hotel operations requires employees to take swift decisions and the setting up of special measures. Crises are always caused by sensitive situations that are poorly managed.

An event's evolution into a crisis cannot always be predicted. It is therefore difficult to comprehensively set out warning procedures applicable to every possible scenario to provide the best response to an unexpected event.

What is a crisis situation?

"Any unusual internal or external event that affects a person (customer, employee, executive or third party), an area of business (hotels or subcontracting) or a geographical area and that, if it is not managed effectively from the outset, may harm Accor Hotels' reputation business or development or render the entity, Accor Hotels or one of its representatives liable."

How is organized Accor Hotels Crisis Management system?

The Accor Hotels crisis management system is organized into various levels of crisis, depending on the warning level:

- **Level 0: Hotel event**
Only the hotel is affected, and the event can be handled by the hotel manager and staff.
- **Level 1: Hotel crisis**
The impact on the Hotel is more critical, and the hotel convenes its Crisis Committee. The event can be handled by the hotel manager and staff with help from the country/region head office if necessary.
- **Level 2: Country/Region crisis**
The event may have repercussions for more than one hotel, a region or a country without affecting the overall operation of Accor Hotels or harming its image. The country/region head office handles the crisis in conjunction with hotels. The country/region head office Crisis Committee is convened.
- **Level 3: Worldwide crisis**
The event may extend to affect Accor Hotel's operation overall, or entail harm to its image or reputation. Global Head Office Handles the crisis in conjunction with country/region head offices. Hotel, country/region and Worldwide Crisis committees are convened.

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Country/Region Crisis Management Committee

- Mr. Philippe BATTLE - Area Manager of Myanmar/GM of Novotel Yangon Max - The Decision-Maker
- Ms. Chit Chit Naing - Director of T&C - The Coordinator
- HODs - HODs - Members

Mercure Hotels Yangon Kaba Aye Crisis Management Committee

- | | | | | |
|------------------------|---|---|---|--------------------|
| 1. Mr. Richard Tin Tun | - | General Manager | - | The Decision-Maker |
| 2. Mr. Michael | - | Resident Manager | - | The Coordinator |
| 3. Mr. Toe Lwin | - | Assist; Safety, Security & Risk Manager | - | The Recorder |
| 4. Ms. Khin Kathi Sann | - | Director of Sales & Marketing | - | member |
| 5. Ms. Kyi Kyi Swe | - | Financial Controller | - | member |
| 6. Mr. Naing Aung | - | Front Office Manager | - | member |
| 7. Mr. Nyi Nyi Win | - | Executive Chef | - | member |
| 8. Mr. Naw Kabel Say | - | T&C Manager | - | member |
| 9. Ms. Cathrine | - | Executive Housekeeper | - | member |
| 10. Mr. Moe Kyaw Naing | - | Chief Engineer | - | member |

The Decision-Maker

➤ **Under Normal Circumstances**

- The decision-maker is responsible for instilling a “crisis-awareness” culture in the hotel
- He determines the crisis management organization appropriate to the business (agreed by the line manager)
- He ensures the entire crisis management procedure is operational
- He builds a network of people likely to be contacts in the event of a crisis situation
- He ensures the crisis directory is up to date, openly and permanently available

➤ **In The Event of an Alert/Crisis**

- The decision-maker take the measures necessary to deal with the event
- He warns his immediate line manager and the country/region crisis coordinator
- He assesses the event and decides whether to trigger the crisis management procedure
- He takes decisions (in accordance with instruction from head office/the building owner)
- He ranks priorities for hotel staff

➤ **Post-Crisis**

- The decision-maker designates an individual to take charge of collection feedback to analyze the crisis situation experienced
- He approves the post-crisis review report and remedial action plan
- He monitors implementation of the action plan



The Coordinator

The coordinator is the conduit for all information between the various parties involved in the crisis management procedure:

- He summarizes the information available and coordinates the exchange of information with the head office Crisis Committee coordinator and with the emergency services.
- The coordinator prepares a situation review including:
 - Available information
 - Missing information
 - Option and decision, with each person tasked with applying and monitoring actions at the start of each meeting.
- He reviews progress with actions undertaken and changes in the situation, on the basis of the log book and information received from the head office Crisis Committee.
- He supervises application of the provisions in the crisis management manual, with no interference in the content of decisions.

The Recorder

- The recorder notes the chronology of events, factual details, information sources, and all decisions taken by the hotel's management in the log book.
- He writes or approves minutes of meeting.
- At the end of the crisis, he gives a copy of the log book to the decision-maker.

Front Office Department

- Brief front office Assistant Managers and staff on the situation. All necessary action is to be implemented with the minimum disruption to normal services.
- Assistant Manager is a member of Hotel Emergency Action Team (HEAT).
- Assistant Manager to advise guest accordingly should shuttle services be limited or restricted due to the crisis circumstances. If the guests want to leave advise them of the situation and if they insist on going, remind them to proceed with caution and take note at log book.
- If there have a requisition from the guest or Hotel Crisis Committee, to contact their company or embassy.
- Remind all staff to reflect a calm attitude at the front desk. Be alert in answering queries and remind guests to remain in-house. Always provide reassurance to guests.
- Keep carefully a cash drawer, keys card drawer and documents in crisis situation.
- Responds to guest elevators at ground level.
- Instruct one staff to print out an in-house guest list by room number and another one alphabetically for reference when needed.
- To assist handicapped guests, pregnant woman, kids and old person.
- Valet parking and shuttle services are to discontinue immediately.
- All hotel vehicles are to be moved to the lobby entrance driveway around portico area the concierges are to be stationed there to secure the vehicles and communicate with the hotel for any assistance.
- All main entrance staff is to concentrate on securing the front driveway and main entrance, and participate in screening entry to hotel premises.
- Telephone Operators to use call filtering form and call transcription sheet in crisis situation.

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- Telephone Operators to announce a crisis situation by PA system if get the instruction from Decision-maker.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) and report to the recorder.
- Any inquiries from media were passed to Communication Manager and from Government/Regional authorities were passed to Safety, Security & Risk Manager.

Housekeeping Department

- Executive Housekeeper will proceed to the staff for a situation briefing.
- One Housekeeping staff is a member of Hotel Emergency Action Team (HEAT).
- Shut down an emergency gas bar and laundry equipment.
- Issue a portable emergency light in the guest room because Government electric power will cut off and power shortage in crisis situation.
- Keep all documents and valuables.
- All chemical things are keeping properly.
- Remind all staff to reflect calm attitude and provide reassurance to guests.
- Push your cart into service area or a vacant room to clear the corridor. Take an emergency torch light.
- To answer for the guest inquiries about crisis situation.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) and report to the recorder.

F&B Department

- Department Head will proceed to the staff for a situation briefing.
- Area/Location that are identified to vulnerable or that represent a risk will be temporarily shut down. Clients patronizing such areas will be politely invited to outer location/outlet.
- Keep all documents and valuables.
- Liquor bottles and glasses are away from the guest and staff in crisis situation.
- Shut down emergency gas bar and or kitchen exhaust fan immediately.
- Shut down all equipment in the kitchen.
- All knives and hot cooking oil are keep properly.
- Remind all staff to reflect calm attitude and provide reassurance to guests.
- To answer for the guest inquiries about crisis situation.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) and report to the recorder.

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ACCORDHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Sweat Club

- Department Head will proceed to the staff for a situation briefing.
- Request to stop immediately the guest who is doing exercise or swimming.
- Shut down all equipment.
- To answer for the guest inquires about crisis situation.
- Remind all staff to reflect calm attitude and provide reassurance to guests.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) and report to the recorder.

Sales &Marketing Department

- Department Head will proceed to the staff for a situation briefing.
- If there have a requisition from the guest or Hotel Crisis Management Committee, to contact their company, NGO, UN or embassy.
- To answer for the guest inquires about crisis situation.
- Keep all documents.
- Remind all staff to reflect calm attitude and provide reassurance to guests.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) and report to the recorder.

Finance Department

- Department Head will proceed to the staff for a situation briefing.
- Secure all documents, cash and valuable.
- Change to the local currency to use in crisis situation periods.
- IT officer standby at the hotel and has a plan B for emergency of internet connection and telephone line in crisis situation.
- To get an assistance of security if necessary.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) and report to the recorder.

T&C Department

- Be secured cash, documents and valuables.
- To arrange meal for staff regularly.
- To arrange transportation for the staff regularly.

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- To arrange for the staff relaxing coordinate with Housekeeping Department if they cannot go back home in crisis situation.
- Provide fully first aid box at the reception and security.
- Submit to the General Manager to issue advance some cash to the staff for their salary in crisis situation.
- Continue to monitor situation and to coordinate at all times with hotel crisis management committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) with today attendant list and report to the recorder.

Engineering Department

- Department Head will proceed to the staff for a situation briefing.
- Duty engineer is a member of Hotel Emergency Action Team (HEAT).
- Also all engineering staff are members of firefighting team. Therefore, you ready to assist to Hotel Crisis Management Committee.
- You will involve extinguishing a fire or something together with HEAT team and Hotel Crisis Management Committee when they need.
- Shut down the machines, equipment, electrical appliances and gas line if necessary.
- Be more careful Generators and Transformers because Government electric power will cut off in crisis situation.
- Assist to the IT officer to maintain an internet connection and telephone line.
- Building plans are ready to assist Hotel Crisis Management Committee.
- To contact with YESB, YCDC, MPT and contractors if necessary.
- Continue to monitor situation and to coordinate at all times with Hotel Crisis Management Committee.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) with building plan and report to the recorder.

Safety, Security & Risk Department

- Alert all Security on duty staff and brief them on the crisis situation.
- Implement all things from decision of Global Head Office or Country/Region Head Office or Hotel Crisis Management Committee.
- Monitor government announcements over the radio or T.V.
- Monitor government /regional authority's instruction that will be reported to the Decision-maker.
- Evaluate the situation and recommend an action plan to the Decision-maker.
- Also all security staff are members of firefighting team. Therefore, ready to assist to Hotel Crisis Management Committee.
- Assign one security staff who informs F/O A.M and telephone operator about the information of crisis situation to know circumstances in order to answer queries from guests.
- Ready to use fire and safety equipment and documents (forms) for Hotel Crisis Management Committee.
- Remain in position unless otherwise instructed by the Hotel Crisis Management Committee.

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- Close the staff entrance, gate (1), (2), (4) & (5) if necessary. Gate (1) security checks carefully employee, visitor and contractor.
- Take in-house guest list from Front Office by name and room number for gate (3) security to concentrate on screening people at gate (3). Allow only legitimate guests/clients entry.
- Double up security assign in lobby/drive way area and assign in some critical area (Lift motor room, Generator room, transformer room etc.)
- Deploy an available staff from other departments to reinforce security if necessary.
- Initiate security manpower contingency planning by partially or totally retaining off-duty staff.
- Issue hand-held radios to key personnel.
- Keep a close liaison with Police and government /regional authority.
- Event of nature can extend from a few hours to days or even weeks. This should be taken into consideration when formulating the contingency planning.
- To process evacuation procedures, direct and assist to the guest on the way of Assembly Area (1) & (3) if get the evacuation instruction from Decision-maker.
- Leave the hotel by nearest emergency exit to Assembly Area (2) with visitor, contractor, room maid list and report to the recorder.



In-House Organization

Catering

- In crisis situation, be responsible by T&C, HSK and F&B Departments.

Transport

- In crisis situation, be arranged by T&C, SSR Departments and assisted by F/O.
- Will be arranged by a taxi or contract ferries or hotel cars.

Staff Relaxing

- The staff will be duty as long hours or split duty in crisis situation.
- T&C Manager will be arranged for staff relaxing at ground floor and level (1) staff lounge assisted by HSK.

Stay In-house During in Crisis

All Department Heads have to stay in-house. Following staff also should stay in-house during in crisis situation:

- All SSR staff and Engineering staff.
- Some nominated Kitchen staff
- Some nominated staff from others department as necessary
- HODs will be created an assignment and deployment for their staff in crisis situation to assist Hotel Crisis Management Committee.

Stock Policy

Hotel will store the following stocks for three months:

- Water
- Diesel
- Gas (LPG)
- Food
- Stationary
- Money



Dealing with a sensitive event

These recommendations are to be implemented **once emergency first aid has been given**.

First of all

- Ensure customers and staff are in safe conditions.
- Make sure that everyone is out of immediate danger. Evacuate the site if need be; alternatively limit the movements of customers and staff. In the event of doubt regarding possible contagion, isolate sufferers.
- Ban access to hazardous sites. Potentially reinforce security in reception (e.g. for demonstrations, industrial action).
- Alert the emergency services and/or relevant authorities (Police, Fire Brigade, Health authority, etc.).

Once the immediate danger has passed

- Convene a Crisis Management Committee meeting with the members to coordinate the next steps to take.
- Ensure the family and friends of the victim(s) are looked after.
- Keep customers and staff regularly informed, keep to the facts to prevent rumours.
- Report to immediate line manager or crisis coordinator (To be completed by each country region head office)
The hotel contact/inform by phone about incident/impacting event to the hierarchy (NAME+ Phone Number + email)
- The hierarchy contact/inform by phone to the country/region crisis coordinator (NAME + Phone Number + email)
- The country/region crisis coordinator make transmission of alert by phone to worldwide crisis permanence (+33 (0)609 100 200 alert. hotline@accor.com)
- Points to be addressed with them:
 - Is there still a danger? Is the danger yet to come?
 - Are there any victims or a serious risk to health or safety?
 - What damage to property has been caused? Is operation of the business in jeopardy?
 - Is it possible that the situation was caused by a malicious act or terrorism?
 - Has serious event occurred nearby, to a partner or a competitor?
 - Are the media present?
- Send the report on initial information with the form to the line manager and the country / region crisis coordinator. Send a copy to the Worldwide Crisis Committee if necessary.

Once The danger has passed

Dealing with the media pressure

- Communication is a key factor in crisis situations, and demands great care.
- Contact the country / region Communications Department and follow their instructions.
- Generally speaking, and until the Communications Department issues specific instruction:

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- Avoid commenting to the media, even when strongly pressed to do so.
- Do not give the names or function of people entering, present or leaving.
- Depending on the situation and pending instructions from the **Communication Department**, the following standard phrasing can be used to deal with inquiries:

“We are in the process of collecting all the necessary information, and we’ll get back to you as soon as we are in a position to do so.”

OUR PRIORITY IS TO ENSURE THE SAFETY OF OUR CUSTOMERS AND STAFF.

UNFORTUNATELY, WE CANNOT MAKE ANY FURTHER COMMENT.

WE’LL GET BACK TO YOU AS SOON AS WE ARE IN A POSITION TO DO SO.”

**We are in the process of collecting all the necessary information.
Our very first priority is ensuring the victims are properly looked after.
Unfortunately, we cannot give you any further information at the moment.”**

- Remind staff that they must not talk to the media.
- Provide a suitable, separate holding area for the media. (Federation Ball room or Kaba Aye meeting room)
- Check call handling at the Operator / Reception (call forwarding or collection of contact details).

Managing the situation

- Open the log book at the start of the crisis situation and record events, decision and steps taken, and the names and detail of the persons involved, in detail and with exact timing, as and when they occur.
- Assign duties to available staff.
- If necessary, inform any partners affected, while keeping to the facts as known.

Monitoring the situation

Keep and audit trail of events, decision and actions.

- Continue to update the log book.
- Always record the identity the persons involved in on-site operation (excluding the emergency services).
- Collect witness statements from customers and staff, and note their names and contact details.
- Photograph or film the site concerned (**but do not photograph any victims**) and damage to property.
- Contact the insurance company if there is a claim to be made.

Assist victims with future arrangements

- Obtain regular updates on their progress (Hospitalization, etc.).
- Help and support customers and staff in all procedural matters (pressing charges in the event of assault, consulting doctors, etc.). Remember to retain documents providing evidence of assistance offered.
- Offer counseling to staff and customers who might need it.
- If applicable in the country in question, convene a meeting of the Occupational Health and Safety Committee.

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Communications

The designated Communication Centre is the Business Centre.(RTW)

Hotel Crisis Management Committee used by telephone (including satellite phone), Walkie-Talkie and Special messenger in crisis situation.

During the crisis situation, spokespersons should be limited to the minimum. This is to avoid confusion, which could arise if there are too many communicators of information.

It is recommended that the Decision-maker take on the role of spokesperson. In the Decision-maker absence, Communications Manager should act on his behalf.

Other spokespersons may be nominated, as required, by the Decision-maker, but only to address specific

audiences such as in the roles defined below:

Decision-maker	- Primary spokesperson/All including Media/Embassy/Owner liaison/Head office/ Country/region Head office
Director of Sales & Marketing	- Travel & Tour company/agency, Client, In-house guest company.
Safety, Security & Risk Manager	- Army/Law enforcement authorities.
T&C Manager	- Labor/Employees.
Communications Manager	- Media/Embassies/Guests.
Chief Engineer	- YESB/YCDC/MPT /Contractors.

Satellite Telephone

- To ensure the ability to communicate if landline and mobile networks are out of service, it is recommended that each hotel or group of hotels in given geographical area avails itself of a satellite telephone.
- This recommendation applies mainly to countries/regions where natural risks and / or political instability are found.
- The device should be tested regularly to ensure it is working properly.
- If a crisis situation occurs in a country with no satellite telephone, the Safety, Security & Risk Department has an emergency communication case available in Paris which can be urgently dispatched to a site.
- This emergency case contains:
 - a satellite telephone.
 - a walkie-talkie .
 - office supplies.
 - electrical equipment (extension cables and adaptors)
- Note that the use of a satellite telephone should be limited and can be harmful to the user's health, especially for pregnant women.
- Employees trained in using satellite telephone have to sign a confirmation that they have read and understood the user guide for device.

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ACCORHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Procedure for call filtering

Note:

- Do not give out any information.
- Neither confirm nor deny anything the caller says.
- Do not give any personal interpretation of events.
- Never take a stance.
- Do not answer questions, just take a message.
- Do not give out your personal contact details.

Behavior to adopt

- Whenever possible, **Transfer the call**. However, if circumstances make this impossible, accurately note down the questions and the caller's details and role.
- Listen
- Stay calm and even-tempered.
- Adopt a neutral tone and remain polite.
- Act as if you want to help the caller.
- Reiterate that only official representatives (police, the courts, etc.) are authorized to give out information about victims or missing persons.

Five possibilities:

- 1) The call is from an Accor Hotels employee (e.g head office, hotel etc.)
Transfer the call to **Decision-maker (Telephone no.)**
- 2) The call is from an external service provider
Transfer the call to **concern department (Telephone no.)**
- 3) The call is from the general public (individuals, customer's families, etc.)
 - During office hours, to **reception counter, Sales & Marketing Department (Telephone no.)**
 - Outside office hours, to **reception counter, EOD (Telephone no.)**
- 4) The call is from the media, an institution, etc.
 - Journalists - **Communications Manager (Telephone no.)**
 - Local authorities – **Safety, Security & Risk Manager (Telephone no.)**
 - Police, government departments - **Safety, Security & Risk Manager (Telephone no.)**
- 5) If conditions mean the call cannot be transferred
 - Stay calm and even-tempered
 - Listen and be receptive
 - Fill in the call **transcription sheet** and send it to **Coordinator or Recorder**

Report on initial information

The Recorder for filling the Report on **initial information form** is closest on the ground in a fit physical and psychological condition to do so.

Post –Crisis Review Questionnaire

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The decision-maker compiles Post-Crisis Review Questionnaire with an assistance of Coordinator and Recorder as following:

Hotel name: **Date:**

First name & Surname: **Position:**

Crisis Situation Name:

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1. What were you doing at the time the event happened?
2. Were there any forewarnings? If so, how was the information received and used?
3. What was done first?
4. What was the most difficult and why?
5. Which protagonist or segment of the public was the most difficult to handle and why?
6. What surprised you the most (internally and externally)?
7. What do you see as the most striking and most revealing points?
8. Which details, positive or negative, became of crucial importance in managing the crisis event?
9. In your view, were the in-house protagonists well-prepared?
10. What lessons have you learned from the crisis procedures and organization in place? What is your view of the decision-making process?
11. Did you experience difficulty in dealing with media pressure? If applicable, were you able to follow Global Head Office instructions or did you have to cope with unforeseen circumstances?
12. What lessons have you learned in terms of internal communication and handling information flows? Did information management (or lack of management) have any repercussions on other sites or hotels?
13. What lessons have you learned in terms of external communication (e.g. commercial, authorities, or victims' families and friends)?
14. Are there legal aspects you feel it is important to raise? Was the legal aspect of the crisis managed satisfactorily?
15. Was Knowledge of the local environment (knowing the protagonists, how institutions operate, language, perception, etc.) sufficient to provide for effective crisis management?
16. How do you assess the quality of the interface between various crisis units (local, hotel, country/region and Global Head Office)?
17. How did you manage resolution? How did the resumption of normal operations go? Who took the decision to resume normal operations and on what criteria? How did you pass information down to staff?
18. Looking back, do you have any regrets about this crisis situation? Is there anything you would have liked to have dealt with, or dealt with better?
19. How do you currently feel about the company's response to emergencies?
20. Have you conducted post-crisis review with staff involved in the crisis? If so, what key (positive or negative) points emerged? If not, when do you plan to conduct one?
21. Open questions, doubts, priority areas for improvement?

The above questions are purely indicative, and not a complete list, to help organize information by subject area to optimize the efficiency of feedback.

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ACCORDING TO THE PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

To sum up, if you had to retain 3 to 5 key ideas (lessons, principles and essential points) for each following, what would they be?

1. Positive points that are worth noting and using if future

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2. Negative points in the category of "Never again!"

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3. Points giving rise to questions, doubts and a need for discussion

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4. Ideas to improve the effectiveness of the procedure

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5. Other subjects to be addressed

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CYBER-ATTACK / DATA BREACH

(Examples: theft, loss, destruction or illegitimate access to the personal data of guests or employees, credit card theft, compromise of payment devices; etc.)

NOTICE

This guidance is to help you manage the first moments when you suspect a cyber-attack or a data breach.

Swift action is essential: the first hour is crucial.

>> Definition: A cyber-attack or a data breach is a security incident that may affect in more or less significant way the database / IT systems.

❖ Example: Intrusion or illegal access to a database or computer system containing confidential information... hacking, phishing, etc.

Here are some situations:

- ☐ An employee or a third party (customer, Accor employee, hotel staff, hotel external service provider, hotel or head office bank(s), external organization or service provider...), reports to you an unusual event on his bank account, or his "accor.com account...
- ☐ You spot a suspicious behaviour. For example: a technician arrives unexpectedly at your hotel, claims to be working for a bank, and wants to change the electronic payment terminals.
- ☐ An IT team member sends an alert.
- ☐ You receive a blackmail or a ransom request from a data thief or hacker.

**INFORM YOUR MANAGER WITH NO DELAY.
IF THE INCIDENT IS RELATED TO A PERSONAL
ACTION, YOUR SPEED OF REACTION WILL LIMIT THE
CONSEQUENCES**

A P A C H E

ACCORHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

>> First of all

Security measures

- ☐ Avoid any manipulation that could aggravate the situation or destroy any trace or supporting documentation.

Do not manipulate anything, do not disconnect anything, do not switch off anything: any manipulation must only be carried out by internal IT teams or by service providers officially designated by the internal IT teams. Protect the elements useful for the possible investigation

Alert the emergency services and/or relevant authorities:

Immediately report the incident or your suspicion to

- ✓ your IT helpdesk
- ✓ to the **General Manager**, if you work in a hotel,
- ✓ to your **manager**, if you work in a Accor support office or one of Accor's other businesses,

If they could not be reached by phone, send an email to the IT department. Copy:

World Crisis Permanence alert.hotline@accor.com

- ☐ Try to gather all information you can in relation to the cyber-attack or data breach:
 - What happened?
 - When did the event happen?
 - What is the first thing you noticed?
 - What is the cause of the incident?
 - What was your first reaction?
 - Which data, information or systems are involved?
 - Who has been impacted?
 - Who else is involved?
 - What is the impact on the business?
 - How long might it take to resume normal operations?
 - Is there media presence?

In this situation, after the alert, your manager will follow the escalation process. As the person who triggered the alert, your presence and participation may still be necessary, make sure you remain available.

APACHE

ACCORHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Report to immediate line manager and country/region crisis coordinator

- ☒ Contact the country/region management and the crisis coordinator at the country/region head office, as soon as possible.
Template downloadable from Accorlive/Security-Security Department/Crisis Management/Hotels.
Target audience: N+1 and country/area crisis coordinator
Copy: World Crisis On call (alert.hotline@accor.com) if necessary
- ☒ Designate the Crisis Committee, convene a meeting with the members to coordinate the next steps to take

Manage the event

- ☒ Open the log book at the earliest possible opportunity.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.

Keepn audit trail of events, decisions and actions

- ☐ Continue to update the log book, and keep it and all documents related to managing the event secure.
(Bear in my mind that in case of legal proceedings, your log book will be essential to understand the circumstances and aftermath of the incident)

>> Monitoring the situation

Manage communication and potential media pressure

- ☐ Contact the country/region Communications Department and follow their instructions.
 - ☐ Pending specific instructions:
 - ☒ Avoid making any comment. The following response can be used to deal with inquiries:
"We are in the process of gathering all the necessary information; we will get back to you as soon as possible."
- Even if the media make repeated inquiries, it is advisable not to agree to any interviews and repeat the "holding message" until instructions are received from the Communication Department.*
- ☒ Remind staff of this directive.

**Your vigilance and contribution are essential for Accor to meet these obligations.
We thank you very much for this.**

Appendix 1: Incident Report

Incident name / reference: Hotel code (if applicable): Creation date:	
Issuer of the alert Contact information for the person reporting the incident	Name:
	Phone:
	E-Mail:
	Position:
Incident type - IT system compromised - Skimming / payment terminal tampering - Stolen or lost documents / media - Accidental Disclosure/Human error - Ransom request - Scam - Other	
Incident scope Hotel or entity name, systems involved, etc.	
Impacted data Type of impacted data (type of personal data, credit card details, etc.) Amount of impacted data Number of impacted persons	
Dates Fill appropriate dates according to the incident status	Detection:
	First evidence:
	Eradication:
	Closed:
Mitigation steps Shortly describe actions taken to mitigate the incident i.e. temporary resolutions	
Resolution steps Shortly describe actions taken that led to the incident being resolved	
Other questions - Media coverage / social networks - External resources used - Other relevant information	

EARTHQUAKE

NOTICE

This guidance is an aid to managing sensitive situations.

Its recommendations may be followed simultaneously, or in a different order, as the situation requires.

Swift action is essential: the first hour is crucial.

The top priority is to take effective action.

Managing sensitive situations is a team effort involving all levels of the organisation.

Definition: ground-shaking that can induced the collapse of buildings and tsunami.

You first need to be aware about the seismic risk with intensity level for your hotel and you also need to know if your building is adapted to seismic risk and until which level. In case of doubt, please check with your risk manager.

TO ALWAYS KEEP IN MIND, especially if the hotel is located in a seismic zone:

>> First of all - before

Check regularly your equipment

- ☐ Check that all high furniture units (above 1.20 meter) are well fixed to the wall with adapted fixation. Edges on shelves can also prevent some objects from falling off.
- ☐ Check that electric cabinets and the generator are well fixed to the wall (foot and head).
- ☐ Check that hanged pipes (gas, water) are correctly fixed in order to minimise swinging in case of vibrations. In hotels where seismic risk is high, specific seismic gas shutoff valves need to be installed.
- ☐ Check that all the emergency equipment is suitably stocked.
- ☐ Check that alternative means of communication (satellite telephone, HF radio handsets, etc.) are working properly and can be used at any moment (batteries are charged).
- ☐ Conceal sensitive equipment and documents (IT equipment, accounts, insurance documents, guest and staff lists, etc.).
- ☐ Have some basic equipment and foodstuff (drinking water, dried food, torches, first aid kit, tools, etc.) in place.
- ☐ Take health advice on using water, managing sanitation and waste, etc.

Prepare the team to respond

- ☐ Identify a second assembly area. In case of an earthquake, assembly area in front of the hotel or any building is not safe. You need to find a large open area with no tall or other falling hazards building.
- ☐ Have relevant staff received training on the earthquake preparation and response procedures including how to determine if evacuation is required and how to manage an evacuation.

Important NOTE: During an earthquake, it is often much safer to stay inside a building rather than immediately going outside as glass and masonry can fall onto the street. You do not need to evacuate a building straight away unless it's showing obvious signs of distress or you need to leave due to a tsunami risk.

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- ☐ Consider which job roles will be involved in the earthquake response and evacuation. It is not realistic for the Duty Manager to take on all tasks.
 - What job roles can tasks be delegated to?
 - What will the procedure be at night time when limited staff are available to assist?

>> During an earthquake

Security measures

- ☐ Keep calm
- ☐ Quickly **DROP**, **COVER** & **HOLD**



- **Drop** to the ground (to avoid falling).
- Take **cover** under something strong, like a study desk or table.
- **Hold** onto it until the shaking stops.

If possible:

- ☐ Move away from glass windows & doors and equipment or shelves that may fall.

If outside:

- ☐ Move away from buildings, trees, and power lines, then **DROP**, **COVER**, & **HOLD**.

>> When the tremors stop

Response and rescue

- ☐ Expect aftershocks. If they happen repeat the above procedure

If possible:

- ☐ Protect yourself from further danger by putting on long pants, a long-sleeved shirt, sturdy shoes and work gloves.
- ☐ Check yourself and others for injuries, provide first aid assistance. Set up a safe area for the injured if required.
- ☐ **Only if safe to do so**, conduct a building check to assess damage (walls, floors, doors, staircases & windows) and check for people who may be trapped. Instruct building Chief Engineer to:
 - Lookout for live electric wires and any other hazards. If live wires or a gas or water leak is detected, staff should immediately evacuate and report this to the building Chief Engineer who will arrange for the service to be turned off at mains if possible.
 - Check for small fires and put them out, if trained and it is safe.
 - Check for people who may be trapped, including elevators or toilets (doors opening can be blocked after the shake), or those who may need special assistance, and report back. Any required rescue operations should be left to trained specialists.
- ☐ Call the emergency services if required. Designate a member of staff to greet and guide the emergency services and authorities if relevant.
 - If phone lines are down, use the satellite phone to contact emergency/rescue services. Refer to emergency contact list for relevant phone numbers.
- ☐ Check all services (water, gas, electricity): turn them off at the first time after the Earthquake, preventing derive other disaster. Moreover:
 - When you are in a jam gas leak: cover your mouse and your nose with a wet towel or clothes; do not use fire or turn on electrical equipment, pay attention to metal shock.

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- Grovel on ground when meet fire, cover your mouse and your nose with a wet towel and creep to safe place against the wind.
- When meet poisonous gas revealed, cover your mouse and your nose with a wet towel and run to upped hand against the wind.
- ☐ Do not expect fire fighters, police or paramedics to help you, they may not be available.
- ☐ Update General Manager and Chief Engineer. Use satellite phone if phone lines are down.
If they cannot be reached contact the country/region management (immediate line manager and HR) and the crisis coordinator at the country/region head office.
- ☐ Inform guests and staff: do not use elevator, do not jump, do not crowd.

Proceed to evacuation

- ☐ Advise everyone to evacuate. Advise people to take essential belongings with them if safe to do so (mobile phone or other mean of communication, ID, keys, important medicine...)
In a serious earthquake you may not be able to re-enter the building for a significant time.
- ☐ Advise guests not to use elevators. Check fire escapes are safe to use. If possible, secure cash & premises before leaving.
- ☐ Take most recent back-up reports, rosters, and guest in-house lists, mobile phone and hotel satellite phone with you.
- ☐ The safest route and assembly area must be identified before leaving the building. If usual assembly point is not safe, move everyone to a large open area with no tall or other falling hazards buildings **DO NOT make the assembly area in front of the hotel or any building: the potential building facade collapse represent a vital risk.**
- ☐ If guests have already begun evacuating, assign staff members to check external emergency exits and redirect guests to the safe evacuation point. Instruct the staff in charge of evacuation to proceed with caution when outside and look out for any unstable objects which may fall from above.
- ☐ In an evacuation:
 - All power and gas supplies must shut off before leaving, if it is not already done.
 - After room being checked, draw a mark as a "X" on the door to indicate that the room has been evacuated.

>> Once the immediate danger has passed

- ☐ Designate the Crisis Committee, convene a meeting with the members to coordinate the next steps to take.

Organise help for victims

- ☐ Designate a member of staff to greet and guide the emergency services and authorities.
- ☐ For hygiene and decency reasons, if the disaster has disrupted the emergency services, help in dealing with the bodies of the deceased:
 - maintain the person's dignity (no photography)
 - protect the sensitivities of those present until the emergency services arrive.*Ideally, bodies should be stored in a cool place (e.g. a cold store) and out of sight.*
- ☐ Using staff and guest lists:
 - identify eventual victims and anyone injured.
 - mark off attendance to determine who may be missing.
- ☐ Collect key information about the victim.
Name, address, people to contact, medical information, etc.
- ☐ Instruct any available staff to look after guests and provide reassurance.
- ☐ Ensure family/friends are looked after (especially children and dependent adults) if they are in the hotel.
- ☐ Update hotel staff.
 - *Keep to the facts to prevent rumours.*

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- Remind them to make no comment if asked questions by the media or other guests.

- Ensure hotel's goods and eventual victim's personal effects are kept securely.

Organise management of the event

- Monitor networks likely to provide advice and information. Local radio stations will be broadcasting the most appropriate advice from emergency management officials.
For example: online, radio, TV, specialist warning networks, information from the authorities.
- If the damage is severe and widespread you may be required to supervise guests and staff on site for an extended period e.g. 72 hours. Secure adequate water and food supplies and locate Civil Defence kits.
- Plan rostering accordingly considering staff availability.
- Hygiene protection: water should be protected and disinfected, strengthening check and supervise food → preventing flies and disinfect tableware, eliminate mosquitoes
- Medical aid: first aid team members (and if possible a doctor) check medicine and other medical supplies to see whether it is enough for the next days in case rescuing teams may not be reached in time.
- Security guards, if any, should ensure that the driveway is free from any obstruction that might hinder the entry of fire trucks or ambulances and prevent the entry of unauthorized persons into the hotel with the possibility of theft during the inevitably confusion period that follow.

Report to immediate line manager and country/region crisis coordinator

- Contact the country/region management (immediate line manager and HR) and the crisis coordinator at the country/region head office, as soon as possible.
If they cannot be reached, contact the Worldwide Crisis Committee on +33 609 100 200 (24/7).

Assess the situation with the person contacted:

- Is there still a danger (risk of aftershocks, for example)?
 - Is anyone injured or dead?
 - How many hotel guests and staff are on site?
 - Do the victims include any children?
 - Do the hotel guests or victims include any celebrities?
 - What do the authorities recommend?
 - What is the impact on the hotel's business and on other guests or employees?
 - How extensive is the damage to property?
 - How long might it take to resume normal operations?
 - Is there a media presence on the site?
- If possible, send the Report on initial information.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.

Recipients: immediate line manager and country/region crisis coordinator.

Copy: Worldwide Crisis Committee (alert.hotline@accor.com) if necessary.

If it cannot be sent from the hotel, ask the country/region crisis coordinator to send it.

Manage communication and potential media pressure

- Contact the country/region Communications Department and follow their instructions.
 - Pending specific instructions:
 - Avoid making any comment. The following response can be used to deal with inquiries:
"Our priority is to help those affected and ensure the safety of our guests and staff. We are working closely with the authorities and following their instructions. We will update you as soon as possible."
- Even if the media make repeated inquiries, it is advisable not to agree to any interviews and repeat the "holding message" until instructions are received from the Communication Department.*
- Remind staff of this directive.
 - Provide a suitable, separate holding area for the media.
 - Check call handling at the switchboard/reception (call forwarding or collecting of contact details).

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Continue to manage the event

- ☐ Open the log book at the earliest possible opportunity.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.
Record events, decisions taken, steps taken and names of the persons involved, in detail and with exact timing, as and when they occur.

Always record the identity of persons involved in on-site operations (excluding the emergency services).
- ☐ If possible, make arrangements for hotel guests and employees to telephone their families or friends.
- ☐ Coordinate informing the families of guests and employees who have been killed or seriously injured with the country/region Crisis Committee, police and consular services.
- ☐ Ensure the family/friends of victims are looked after if they go to the hotel.
Inform them about the event while keeping to the facts and without disclosing any medical information
- ☐ Keep guests and staff regularly informed of the facts as known.
Set up a notice board and update the situation regularly

Organise the post-disaster phase

- ☐ Plan for the supply and distribution of drinking water.
- ☐ Plan to feed guests and staff present.
- ☐ Provide clothes to any victims who might need them.
- ☐ Organise sanitation.
- ☐ Organise sleeping arrangements.

>> Monitoring the situation

Keep an audit trail of events, decisions and actions

- ☐ Continue to update the log book, and keep it and all documents related to managing the event secure.
- ☐ Continue to keep guests and staff regularly informed of the facts as known.
- ☐ Keep CCTV footage, and prepare a copy for the police if necessary.
- ☐ Photograph or film the site concerned (but do not photograph victims) and damage to property.
- ☐ Submit a claim to the insurance company and/or broker.

Assist victims with future arrangements

- ☐ Offer counselling to staff and guests who might need it.
Remember to retain documents providing evidence of assistance offered.

If applicable in the country in question, convene a meeting of the Occupational Health and Safety Committee.

Reminder:

- Hotel's construction norms being often higher than those for classic habitation, hotels may become the safe place of refuge for population or may be requisitioned by authorities and emergency services.

APPENDIX - WHAT TO DO IN CASE OF AN EARTHQUAKE - TO BE DISPLAYED

WHAT TO DO IN CASE OF AN EARTHQUAKE

During the shake



Do not try to escape. It is often safer to stay inside the building unless it's showing obvious signs of building distress.



Take cover behind a door, a beam, arch or near the wall. If you stay in the middle of the room it's dangerous, glasses and plaster could fall.



Take cover under a table, under a beam, arch or under a desk.




Do not use the stairs or the lifts.

After the shake



Get out of the hotel. Caution, there might be fallen objects: pots, tiles or broken glasses. You may be hurt.



Go to the collection point indicated but do NOT make the assembly point in front of the building because the facade might fall (follow the indication).



If you leave the hotel by car, do not block the street, the rescue must reach the hotel. Use the car only if it is necessary. Before leaving, report yourself to the hotel staff so that we know you're alive.



Do not block the rescue team, leave the communication system free (mobile phone, internet).



Fire Emergency and Evacuation Procedures

Fire and Safety Committee

We form Fire and Safety Committee (FSC) every year. Security Manager is Chairperson, Maintenance Manager is Vice-Chairperson, Front Office Manager is Secretary, Communications Manager is Spokesperson, and other departmental senior staffs are members. The committee conducts a meeting as following.

- The committee meeting will be held two times a year.
- Committee members discuss in the meeting about fire precautions, how to reduce a fire risk and how to educate fire knowledge for all staff.
- FSC conduct fire drill and practical fire fighting for all staff after meeting.

HEAT (Hotel Emergency Action Team)

HEAT members

- Duty F/O Assistant Manager
- Duty Security Supervisor
- Duty Maintenance Officer
- Duty Housekeeping staff

If receive of fire report by the phone, Operator or Security to take down the following:

- Name, position and department
- Location of fire
- Extent of fire

Operator and Security will inform **HEAT** members.

When an alarm bell is ringing, office security must be followed up following procedures;

- Press silence button on FCC panel and look at an address of alarm bell ringing on FCC screen .
- Inform to **HEAT** members immediately used by W.T.
- Inform to front office reception counter and operator who can answer to the guest's inquire about situation.
- Connect to **HEAT** team, F/O AM, operator, management and other department necessary.

HEAT members do that fire information as following:

- Go to location immediately and check the situation together.
- Inform to the security office the situation through Walkie-talkie.
- Put out the fire together by nearest extinguishers with stability in small stage of fire, don't panic.
- Have to use a breathing apparatus if the smoke is a lot in fire location.
- It is important ensure that, in the event of fire, the rate of fire growth is restricted in its early stage.
- Inform to the security office if the fire is out.
- Investigate and Report to the GM by fire report form.
- If HEAT members saw no fire in location, inform to the security office that the information is wrong or false alarm.
- FCC security will pass all information to operator, Front desk and Management.

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- We make an emergency announcement through PA system the whole hotel about situation if an alarm was ringing the whole hotel.
- All **HEAT** members must respond all fire alarms as real fire.
- Security Manager investigates cause of fire and about fire case, after that report to GM.

Fire Fighting Team

Security manager is a commander and all security and Engineering personnel are the members of fire fighting team. Security Supervisor is a leader of firefighting team after office hour that he has to get decision from EOD. They have been trained Advance Fire Fighting Training in Myanmar Fire Brigade.

Other Disasters

- Cyclone
- Flood
- Earthquake
- Tsunami
- Riot or Violence
- Fatal disease etc.

Security will follow up on the following procedures.

1. Security alert to take an action according to State government and Regional authorities announcement.
2. Security think and act pro-active action and precautions as soon as possible.
3. Security follow up according to instruction of the management and security manager.
4. The management arranges to store food, water, petrol, medicine, first aid box, stationary and other essentials for one month at least.
5. Security avoid rumors and try to get clear information.
6. Spokesperson of the hotel is Communications Manager. She will deal with media, authority or the guest.
7. Security Manager to deal with NGO, Government authorities.
8. Emergency control center is Admin Meeting Room.
9. Security take care for all the guest and staff safety.

General Evacuation Plan

Purpose and Responsibility

- In the event of real fire if there is any danger of the fire spreading and beyond control or strong earthquake or Cyclone that will effect terrible for the safety of the guests and employees.
- Security Manager will report about situation to GM who will determine and instruct to Security Manager for evacuation.
- Security Manager arranges to evacuate effective floor or including up and under floor or the whole hotel depend on the situation.
- It is the responsibility of all employees and guests to respond an evacuation order and to obey all instruction given by the Management in connection with Evacuation Procedures in a real situation and during an evacuation drill.

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- Front Office, Housekeeping and Maintenance Department to coordinate with Security Manager and Security Department.

Signal for Evacuation

- The announcement of evacuation will be through-out the Public Address System, announced by Telephone Operator or FO A.M.
- Fire alarm is ringing the whole time and the whole hotel.
- There are enough escape stair, route, lightings and clear exit signs.

Action by Employees

- On hearing the first message which shall continue sounding for 30 seconds or less, all employees in the affected areas shall standby and be prepared to evacuate.
- On hearing the second subsequent messages, which shall be continuous, the employees in the affected areas shall lock up all documents and cash in drawers, shut all computers and electrical appliances.
- Leave the building in an orderly manner using nearest exit and escape route to Assembly Area (2).
- Report your attendance to Fire Marshall at Assembly Area (2).
- Security and F/O systematically take out all the guests, staffs, room maids, contractors and visitors to Assembly Area used by emergency stairs and route in evacuation. If necessary, Maintenance and Housekeeping cooperate with them.
- They make a cross mark (X) on the guest room door after the guest outgoing to indicate that doesn't confuse the guest inside or not.
- Assembly Area used (2) is near gate (1), (2) for the staff, room maids, contractors and visitors.
- Do not use an elevators an evacuation.
- To provide special assistance for handicapped, disable people, an older, kid, pregnant woman and abnormal person. They can use fireman lift.

Action by General Manager

The GM or in the absence RM who is decision-maker for evacuation who proceeds to Fire Official in ordering an evacuation.

Action by Front Office Manager and Communications Manager

The FOM or his absence the Duty F/O Assistant Manager and Communications Manager proceed to the Assembly Areas to speak to the guests and check with the guest list.

Action by Fire Marshals or Fire Wardens (Security Manager)

- On hearing the first Evacuation Message which shall continue sounding for 30 seconds or less, standby to alert employees and guests in your area to evacuate to Assembly Areas.
- On hearing the second subsequent messages, which shall be continuous, direct all employees and guests in the affected area to evacuate using emergency stairs.
- Two fire wardens assign one floor. One fire warden responsible to take out the left side guest who go down to Assembly Area (1) or (3) used by nearest emergency stairs and one fire warden responsible to

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take out the right side guest who go down to Assembly Area (1) or (3) used by nearest emergency stairs after checking with the guest list.

- They use chalk on the guest room doors (mark X) signifying after checking inside and take out the guest.
- Fire warden arranges to search all guest rooms, offices, stores, toilets and other concealed areas to ensure no guests or employees are left behind.
- Using firefighting equipment if safe to do so.
- Liaising with the Government authority and fire and rescue service on arrival.
- Shutting down vital or dangerous equipment.
- Head count for all employees with duty rosters and attendance list.

Command Center

Hotel security control room is designated as a Hotel Command Center.

Assembly Areas and Escape routes

- Assembly area (2) is designated at the gate (1) and (2) area for the employees.
- Assembly area (1) is designated at the lobby area for the guests. There is nearby the lobby and stair No. (2) & (4).
- Assembly area (3) is designated in front of Marche Mini-Mart for the guests. There is nearby Federation Ballroom
- Escape routes are designated as an emergency stairs No. 1,2,3 and 4 through the long and short corridors.
- There are enough escape lighting, clear exit signs and exit ways.

All clear / re-entry

- The Myanmar Fire Brigade and Security Manager are charge with the responsibility of rescue operation during a fire emergency. Members of **HEAT** and staff who are trained in **CPR** and **First-Aid** will provide support to the authorities.
- In other emergency situation when Myanmar Fire Brigade is not called, the GM shall give such instructions taking into account the size of the incident and its vulnerability.

Rescue Operation

- The Myanmar Fire Brigade and Security Manager are charge with the responsibility of rescue operation during a fire emergency. They search casualty while they are fighting a fire.
- Fire Marshal sends rescue team when the fire is out. They report back to Fire Marshal by the walkie-talkie, when they find the casualty,
- They take out the casualty and makes First-Aid properly.
- An ambulance is ready at Assembly area.



When The Fire is Over

Fire Report

Security Manager investigates necessary as following:

- How did fire start?
- Cause of fire.
- Who did fire start? (guest or employee or stranger)
- Who have been involved? (guest or employee or stranger)
- Witness (people and things)
- Our fire appliances were good to use or not in fire situation.
- Injure or not.
- Cost of damages roughly.

Security Manager reports above things to GM, Myanmar Fire Brigade and other authorities.

Security Manager negotiates with an officer of Myanmar Fire Brigade and authorities to less than detriment of hotel business.

Restore fire services installation to normal condition.

Maintenance Manager shall restore the following system to normal condition as soon as possible:

- Replace new smoke detector or heat detector in activated smoke detector and heat detector.
- Fire alarm system
- Elevators
- Replacements of smashed glass plate of fire call points.
- Refill of used fire extinguishers
- Co₂ Systems
- Electricity supply

Estimate cost of damage

- Department Heads shall report any damage in their respective areas including a guest and employee's properties to Maintenance Manager.
- Maintenance Manager shall prepare an estimated cost of all damages with photos and submit to GM.
- A copy of the damage report will also be submitted to the DOF and Financial Controller for onward transmission to Insurance Company.

Clean-up work

After the fire is put out with the confirmation of Myanmar Fire Brigade or Security Manager, Executive Housekeeper will proceed with all necessary clean-up work. Security and Maintenance Department will coordinate with her properly.

Steps to prevent Recurrence

The General Manager conducts a Hotel Management Meeting to review measures with regards to fire prevention, fire-fighting and to make necessary steps to prevent a similar recurrence for future.

Also the GM conducts a meeting amongst all key personnel including Myanmar Fire Brigade to review measures with regards to fire prevention, fire-fighting and to make necessary steps to prevent a similar recurrence for future.

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CONTAGIOUS DISEASE (SUSPECTED OR CONFIRMED)

NOTICE

This guidance is an aid to managing sensitive situations.

Its recommendations may be followed simultaneously, or in a different order, as the situation requires.

Swift action is essential: the first hour is crucial.

The top priority is to take effective action.

Managing sensitive situations is a team effort involving all levels of the organisation.

Definition: Hotel customer or employee showing symptoms or suffering from a contagious infectious disease (meningitis, German measles, chicken pox, SARS, bird flu, etc.).

>> If a contagious diseases is suspected

Security measures

- ☐ Isolate those taken ill.
- ☐ Identify the persons likely to have been in contact with those taken ill.
- ☐ Restrict access to places likely to be contaminated.
E.g. the customer's room.

Notify the relevant services (doctor, environment health officers, etc.).

- ☐ Ask a doctor to come, or contact the local environmental health office.
Remember to retain any written documents relating to recommendations made by qualified medical staff.

Dealing with any media pressure there might be

- ☐ Contact the country/region Communications Department and follow their instructions.
 - ☐ Pending specific instructions:
 - Avoid making any comment. The following response can be used to deal with inquiries:
"We are taking all possible precautions and we are in the process of collecting all the necessary information. We'll get back to you as soon as we can."
- Even if the media make repeated inquiries, it is advisable not to agree to any interviews and repeat the "holding message" until instructions are received from the Communication Department.*
- Remind staff of this directive.
 - Provide a suitable, separate holding area for the media.
 - Check call handling at the switchboard/reception (call forwarding or collecting of contact details).

If scabies is involved, please refer to the *Scabies* guidance.

>> Once the risk of contagion is confirmed

- ☐ Notify environmental health officers.
- ☐ Designate the Crisis Committee, convene a meeting with the members to coordinate the next steps to take.



Organise help for those taken ill

- ☐ Designate a member of staff to greet and guide the emergency services and authorities.
- ☐ Collect key information about those taken ill.
Name, address, people to contact, medical information, etc.
- ☐ Ensure family/friends are looked after (especially children and dependent adults) if they are in the hotel.
- ☐ Inform hotel staff.
 - *Keep to the facts to prevent rumours.*
 - *Remind them to make no comment if asked questions by the media or other customers.*

Report to immediate line manager or crisis coordinator

- ☐ Contact the country/region management (immediate line manager and HR if staff are affected) or the crisis coordinator at the country/region head office, as soon as possible.
If they cannot be reached, contact the Worldwide crisis permanence on +33 609 100 200 (24/7) for country or worldwide crisis situations.

Assess the situation with the person contacted:

- *What is the presumed cause of the infection?*
 - *How many hotel customers and staff have been infected? How many are likely to be?*
 - *Do those taken ill include any vulnerable people (pregnant, infants, elderly, etc.)?*
 - *Has anyone been admitted to hospital?*
 - *What is the impact on the hotel's business and on other customers or employees?*
 - *Are any of those affected, or any of their family and friends, a celebrity?*
 - *Is there media coverage or a media presence?*
- ☐ Send the Report on initial information.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.

Recipients: immediate line manager and country/region crisis coordinator.

Copy: Worldwide crisis permanence (alert.hotline@accor.com) if necessary.

Manage communication and any media pressure

- ☐ Contact the country/region Communications Department and follow their instructions.
 - ☐ Pending specific instructions:
 - *Avoid making any comment. The following response can be used to deal with inquiries:*
"We are working closely with environmental health officers and have taken the usual precautions under such circumstances. We will update you as soon as we are in a position to do so, once the necessary measures are in place."
- Even if the media make repeated inquiries, it is advisable not to agree to any interviews and repeat the "holding message" until instructions are received from the Communication Department.*
- *Remind staff of this directive.*
 - *Provide a suitable, separate holding area for the media.*
 - *Check call handling at the switchboard/reception (call forwarding or collecting of contact details).*

Manage the event

- ☐ Open the log book at the earliest possible opportunity.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.
Record events, decisions taken, steps taken and names of the persons involved, in detail and with exact timing, as and when they occur.

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Always record the identity of persons involved in on-site operations (excluding the emergency services).

- ☐ If an individual taken ill cannot do so himself/herself, and with his/her agreement:
 - *If domestic regulations so require, the police will inform the family.*
 - *In the absence of specific regulations and with the agreement of the police, the GM (or the country HR Dept. for an employee):*
 - *Will inform the family for a customer or employee who is a national of the country.*
 - *Will contact the consulate or embassy of the customer's or employee's home country, which will take charge of contacting the family.*
 - *In respect of an organised trip, will inform the family in conjunction with the trip organiser or tour operator.*
 - *In the various situations described above, pass on a direct telephone number for contacting the GM without going through reception.*
 - *Keep to the facts.*
- ☐ Ensure the family/friends of those affected are looked after if they go to the hotel.
- ☐ Organise meals for those confined to their room.
- ☐ Ensure the victims' personal effects are kept securely.
Prepare a joint inventory of the personal effects of those taken ill in the presence of a manager and possibly a police officer or member of the emergency services.

>> Monitoring the situation

Keep an audit trail of events, decisions and actions

- ☐ Continue to update the log book, and keep it and all documents related to managing the event secure.
(In case of any legal proceedings.)
- ☐ Follow all recommendations made by the hotel doctor or medical authorities.
Remember to retain any written documents relating to recommendations made by qualified medical staff..
- ☐ Keep customers and staff regularly informed of the facts as known.
- ☐ Seek out and collect useful witness statements from customers and staff.
Note their contact details: full name, address and telephone numbers (see witness statement guidance template).
- ☐ Submit a claim to the insurance company and/or broker.

Assist those taken ill with future arrangements

- ☐ Obtain regular updates on their progress in the event of hospitalisation (or sick leave).
- ☐ Offer help and support to those taken ill in procedural matters.
For example, medical consultations, airport transfer, repatriation, etc.
Remember to retain documents providing evidence of assistance offered.
- ☐ Offer counselling to staff and customers who might need it.
Remember to retain documents providing evidence of assistance offered.

SCABIES

NOTICE

This guidance is an aid to managing sensitive situations.
 Its recommendations may be followed simultaneously, or in a different order, as the situation requires.
Swift action is essential: the first hour is crucial.
 The top priority is to take effective action.
 Managing sensitive situations is a team effort involving all levels of the organisation.

Definition: Scabies is a skin condition transmitted by a parasite, a mite in the *Sarcoptidae* family. The symptoms are itching and a skin rash, of varying seriousness. There are various forms of scabies, human is the most widespread. Human scabies can be passed from one individual to another, whether by direct physical contact, generally prolonged skin-to-skin contact, or via infected items such as bedding, clothing, etc.

The incubation period (between contamination and symptoms first appearing) varies from a few days to several weeks.

This guidance concerns cases of scabies in customers staying or who have stayed at the hotel.

>> Suspected or confirmed risk of scabies contagion

- ☐ Designate the Crisis Committee, convene a meeting with the members to coordinate the next steps to take.

Security measures

- ☐ Do not let new customers stay in the infected person's room or in rooms used by anyone accompanying. *Advise staff working in the room(s) to use disposable gloves and to wash their hands and forearms, with soap, regularly.*
- ☐ Restrict access to rooms likely to be contaminated.
- ☐ Check whether any bedding (pillows, etc.) or furniture (e.g. mobile extra bed) has been moved between rooms.

Introduce general hygiene measures

- ☐ Remove and isolate all washable linen that might have been in contact with the customer (sheets, covers, pillow-cases, under-sheets, towels, etc.) in hermetically sealed plastic bags.
- ☐ Empty the cupboards and wardrobes
- ☐ Have the linen washed (clothing, sheets, pillowcases) at 60°C and have it ironed if possible. *Linen and items that cannot be washed at 60°C (such as bedding, cushions, rugs) must be treated with an acaricide or disinfectant.*
- ☐ Vacuum cleaner bags used to clean the room(s) in question should be disposed of in hermitically sealed plastic bags.
- ☐ Treat linen and carts with an acaricide or disinfectant.

APACHE

ACCORHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Warn the hotel doctor and inform hotel staff.

- ☐ Contact the occupational health practitioner and follow any recommendations.
Remember to retain any written documents relating to recommendations made by qualified medical staff.
- ☐ Inform hotel staff.
 - Keep to the facts to prevent rumours.
 - Remind them to make no comment if asked questions by the media or other customers.

Report to immediate line manager or crisis coordinator

- ☐ Contact the country/region management (immediate line manager and HR if staff are affected) or the crisis coordinator at the country/region head office, as soon as possible.
If they cannot be reached, contact the Worldwide crisis permanence on +33 609 100 200 (24/7) for country or worldwide crisis situations.

Assess the situation with the person contacted:

- How many rooms are affected?
- How many hotel customers and staff have been infected? How many are likely to be?
- Do those infected include any vulnerable people (pregnant, infants, elderly, etc.)
- What is the impact on the hotel's business and on other customers or employees?
- Is the individual infected, or any of the individual's family and friends, a celebrity?
- Is there media coverage or a media presence?

- ☐ Send the Report on initial information.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.

Recipients: immediate line manager and country/region crisis coordinator.

Copy: Worldwide crisis permanence (alert.hotline@accor.com) if necessary.

Manage communication and any media pressure

- ☐ If need be, contact the country/region Communications Department and follow their instructions.
- ☐ Pending specific instructions:
 - Avoid making any comment. The following response can be used to deal with inquiries:
"We are taking all necessary precautions. We are in regular contact with the environmental health authorities and following their instructions."

Even if the media make repeated inquiries, it is advisable not to agree to any interviews and repeat the "holding message" until instructions are received from the Communication Department.

- Remind staff of this directive.
- Provide a suitable, separate holding area for the media if the need arises.
- Check call handling at the switchboard/reception (call forwarding or collecting of contact details).

Managing the event

- ☐ Open the log book at the earliest possible opportunity.
Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.
Record events, decisions taken, steps taken and names of the persons involved, in detail and with exact timing, as and when they occur.

Always record the identity of persons involved in on-site operations (excluding the emergency services).

A P A C H E

ACCOMPHETS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCES

>> Monitoring the situation

Keep an audit trail of events, decisions and actions

- ☐ Continue to update the log book, and keep it and all documents related to managing the event secure.
(In case of any legal proceedings.)
- ☐ Follow all recommendations made by the hotel doctor or medical authorities.
Remember to retain any written documents relating to recommendations made by qualified medical staff..
- ☐ Submit a claim to the insurance company and/or broker.

Assist those taken ill with future arrangements

- ☐ Obtain regular updates on their progress in the event of hospitalisation (or sick leave).
- ☐ Offer help and support to individuals affected in procedural matters.
For example, medical consultations, airport transfer, repatriation, etc.
Remember to retain documents providing evidence of assistance offered.

If applicable in the country in question, convene a meeting of the Occupational Health and Safety Committee.



BOMB SCARE/SUSPECT PACKAGE

NOTICE

This guidance is an aid to managing sensitive situations.

Its recommendations may be followed simultaneously, or in a different order, as the situation requires.

Swift action is essential: the first hour is crucial.

The top priority is to take effective action.

Managing sensitive situations is a team effort involving all levels of the organisation.

Definition: The reporting of the existence of an explosive device or a suspect package either in, or in the immediate vicinity of, the hotel. The source of the tip-off might be anonymous, an employee, a customer or the authorities, and it could be reported in person, by telephone, email, etc.

>> In the event of a bomb scare

The warning can be triggered in several ways:

- Receipt of a written or recorded message (letter, fax, email, voice mail, etc.);
- Telephone call;
- Discovery of a suspect package (*see next section*).

Keep calm and do not alarm customers

- ☐ If the warning comes from a telephone call, collect as much information as possible, referring to the *Receiving a threatening call (Appendix A)* guidance
- ☐ If the bomb scare is triggered by receipt of a letter:
 - handle it with care so as to keep any possible traces and fingerprints needed by investigators
 - Note who has handled it, and restrict the number.

Notify the relevant authorities

- ☐ Alert the police and/or bomb disposal service and follow their instructions.

Take the first steps

- ☐ Depending on the situation and the instructions received, look for any suspect packages, making use of the *Suspect item search (Appendix B)* guidance
The search will be conducted by staff, first in communal areas (reception, restaurant, car park, corridors, lift cages), the grounds and the hotel's key facilities, then floor by floor.
- ☐ Print out a list of customers present and put it in a safe place away from the hotel.

APACHE

ACCORDHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Discovery of a suspect package

Security measures

- ☐ **Never touch or handle a suspect item.**
- ☐ Ban the use of mobile telephones and radio transmitters in proximity to the item.
- ☐ Set up a safety cordon and evacuate everyone inside it.
Open doors and windows within the cordon.

Raise the alarm

- ☐ Alert the police and/or bomb disposal service and follow their instructions.
- ☐ **Report the discovery of a suspect item immediately to the hotel manager and duty manager.**
State the location and the type of item concerned.
- ☐ Attempt to identify the item's owner.
- ☐ Continue searching for any other suspect packages there might be.

>> Evacuation

- ☐ The hotel manager gives the order to completely evacuate the premises:
 - in conjunction with the authorities
 - If an explosive device is actually found.
- ☐ Check no suspect packages are to be found at the mustering point.
If need be, designate a different mustering point. Warn the authorities immediately.
- ☐ Follow the evacuation procedure used in the event of a fire.
Avoid directing people past the location of the suspect package to the greatest extent possible.
- ☐ Prevent anyone approaching the evacuated area.
- ☐ Remove the list of customers present, the list of staff on duty (several copies if possible) and the crisis management file (including the contact lists, the log book and this guidance).
- ☐ Organise a roll-call of customers and staff using the list of customers present and list of staff on duty.
Note their full names, nationalities, languages spoken, where from and the dates of their stay.

If an explosion occurs, please refer to the *Explosion-Fire* guidance.

>> Once the immediate danger has passed or the area has been evacuated

- ☐ Designate the Crisis Committee, convene a meeting with the members to coordinate the next steps to take.
- ☐ Designate a member of staff to greet and guide the emergency services and authorities.
- ☐ Inform hotel staff.
 - *Keep to the facts to prevent rumours.*
 - *Remind them to make no comment if asked questions by the media or other customers.*

APACHE

ACCORHOTELS PROCESS TO ACT IN CRISIS, HAZARDS & EMERGENCIES

Report to immediate line manager or crisis coordinator

- ☐ Contact the country/region management (immediate line manager and HR if necessary) or the crisis coordinator at the country/region head office, as soon as possible.

If they cannot be reached, contact the Worldwide Crisis Committee on +33 609 100 200 (24/7) for country or worldwide crisis situations.

Assess the situation with the person contacted:

- ☐ Is there still a danger?
- ☐ Is anyone injured?
- ☐ How many customers are affected?
- ☐ What is the impact on the hotel's business and on other customers or employees?
- ☐ Do the customers include any celebrities?
- ☐ Is there media coverage or a media presence?

- ☐ Send the Report on initial information.

Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.

Recipients: immediate line manager and country/region crisis coordinator.

Copy: Worldwide Crisis Committee (alert.hotline@accor.com) if necessary.

Dealing with media pressure

- ☐ Contact the country/region Communications Department and follow their instructions.

- ☐ Pending specific instructions:

- Avoid making any comment. The following response can be used to deal with inquiries:

"We are taking all the precautions necessary to ensure the safety of our customers and staff. We are working closely with the authorities."

Even if the media make repeated inquiries, it is advisable not to agree to any interviews and repeat the "holding message" until instructions are received from the Communication Department.

- Remind staff of this directive.
- Provide a suitable, separate holding area for the media.
- Check call handling at the switchboard/reception (call forwarding or collecting of contact details).

Managing the situation

- ☐ Open the log book at the earliest possible opportunity.

Template downloadable from AccorLive/Safety and Security Department/Crisis Management/Hotels.

Record events, decisions taken, steps taken and names of the persons involved, in detail and with exact timing, as and when they occur.

Always record the identity of persons involved in on-site operations (excluding the emergency services).

> Monitoring the situation

Keep an audit trail of events, decisions and actions

- ☐ Continue to update the log book, and keep it and all documents related to managing the event secure. *(In case of any legal proceedings.)*
- ☐ Keep customers and staff regularly informed of the facts as known.
- ☐ Seek out and collect useful witness statements from customers and staff. *Note their contact details: full name, address and telephone numbers (see witness statement guidance template).*
- ☐ Keep CCTV footage, and prepare a copy for the police if necessary.
- ☐ Fill in the Incident report

A P A C H E

ACCORDHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Assist hotel customers and staff

- ☐ With the authorities' agreement, allow customers and staff back into the hotel
- ☐ Offer counselling to staff and customers who might need it.

Remember to retain documents providing evidence of assistance offered.

If applicable in the country in question, convene a meeting of the Occupational Health and Safety Committee.

What not to do!

- Ignore or fail to take seriously the reporting of a suspect package
- Alarm customers



APPENDIX A - RECEIVING A THREATENING CALL

The following guidance should help you obtain as much information as possible when a bomb warning is received by telephone.

Remain calm and be polite.
Listen carefully, and do not interrupt the caller.
Try to obtain as much information as possible.
Fill in this form and give it to the General Manager.

Incoming call:

Date:	Time:	Call duration:
Full name of staff member:		Hotel:
Precise wording of the call (continue overleaf);		

If the call is from the authorities, verify by taking the caller's name and calling back the organisation using a telephone number determined previously.

Questions to ask

WHO are you?
WHEN is the bomb due to go off?
WHERE is it?
WHAT does the device look like?
WHY was the bomb planted?

Caller identification

- ☐ Man ☐ Woman ☐ Familiar voice (give details):
☐ Adult ☐ Adolescent ☐ Caller seems to know the premises (give details):

Voice characteristics

- ☐ Loud ☐ Quiet
☐ High-pitched ☐ Deep
☐ Disguised
☐ Recorded message

Attitude

- ☐ Calm ☐ Angry
☐ Solemn ☐ Cheerful
☐ Coherent ☐ Incoherent
☐ Determined ☐ Emotional

Background noise (give details):

Accent

- ☐ Local
☐ Foreign (give details):
☐ European (details):

Language level

- ☐ Excellent
☐ Average
☐ Poor

Elocution

- ☐ Fast ☐ Slow ☐ Stuttering ☐ Nasal
☐ Clear ☐ Distorted ☐ Slurred ☐ Lisp

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O Other (describe):

APPENDIX B - SUSPECT ITEM SEARCH MANAGER CHECKLIST

This procedure aims to detect any item that is suspect because:

- it should not be there
- it is of unknown provenance
- it is not where it belongs
- its appearance is unusual
- it is similar to an item described during a bomb warning.

Keep calm.

If possible, form teams of two staff and assign them an area to search.

Reiterate the instructions in the event a suspect item is found.

Fill in this form.

Search instigation:

Date:	Time:	Hotel:
Surname and first name:		
Reasons for search:		

Instructions to be given to search teams

- **Never touch or handle a suspect item.**
- Set up a safety cordon and evacuate everyone inside it. Open doors and windows within the cordon.
- **Report the discovery of a suspect item immediately.**
- Ban the use of mobile telephones and radio transmitters in proximity to the item.
- Attempt to identify the item's owner.
- **Do not call a halt to the search**, when the first item is discovered, in either the area concerned or other areas.

Procedure

- ☐ Reiterate the search technique:
 - On entering each area, take a moment to scan the room to spot anything unusual.
 - Search each room by dividing the area into height levels: ground level, up to shoulder height, and up to the ceiling.
 - Always extend the inspection into neighbouring areas by opening doors (staircases), looking through windows, etc.
 - Be thorough, and **remember to look inside wastebins**, cupboards, behind curtains, under tables with tablecloths, pot plants, etc.
- ☐ Issue instructions depending on their familiarity with the search area.
Staff will consequently be in a position to locate anything unusual - objects moved, open cupboards, suspect items, etc.
- ☐ Start the search in the area described in any bomb warning received, and in easily accessed areas, which terrorists often prefer.

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ACCORDHOTELS PROCESS TO ACT IN CRISES, HAZARDS & EMERGENCIES

Checklist *(adapt for each hotel)*

Areas to search	Designated person(s)	Checked (note time)
Lobby and reception Concierge's office Administrative office Sales and bookings department Left luggage Cloakroom		
Restaurant 1 Restaurant 2 Bar 1 Bar 2 Lounges Kitchens and toilets		
All floors accessible to customers Linen room and sink units Ice machine rooms Lift cages		
The hotel's immediate vicinity Mustering points Parking areas (Look out for suspect vehicles)		
All meeting rooms		
Swimming pool (+ equipment room) Outside communal areas Terraces and gardens		
Car parks and garages Delivery bays		
Roofs, lift & electrical equipment rooms Heating and maintenance area		
Technical offices Management offices Maintenance department Laundry Storerooms		
Other area to be checked (state which)		
Other area to be checked (state which)		



Contact Lists

Emergency numbers

Fire

- | | |
|--|--|
| 1. Fire Emergency | - 191/01-666912, 01-666913, 01-666904 |
| 2. Central Fire Station | - 01-252011, 01-252022, |
| 3. Yangon Region Fire Station | - 01-252011 |
| 4. Zone Fire Station (South Oakkalapa) | - 01-577041 |

Ambulance

- | | |
|----------------------------|------------------------|
| 1. Yangon General Hospital | - 192 |
| 2. Myanmar Red Cross | - 01-295133, 01-383684 |

Hospital

- | | |
|----------------------------------|-----------------|
| 1. Yangon General Hospital | - 01-256112-131 |
| 2. Yangon General Hospital (New) | - 01-379106 |
| 3. Central Women's Hospital | - 01-222804-6 |
| 4. Children's Hospital | - 01-222807-810 |
| 5. Worker's Hospital | - 01-554455 |
| 6. Thingangyun Sanpya Hoapital | - 01-579890 |

Police

- | | |
|--|--------------|
| 1. Police Emergency | - 199 |
| 2. Yankin Township Police Station | - 01-7577190 |
| 3. Yankin Township Police Commander | - 01-7577071 |
| 4. Yangon Regional Police (Head Office) | - 01-379661 |
| 5. Yangon Regional Police (Duty Officer) | - 01-381235 |
| 6. Police Regional (2) | - 01-577116 |

Electricity

- | | |
|------------------------------|-------------|
| 1. Yankin Township Office | - 01-650669 |
| 2. Mayankone Township Office | - 01-660210 |

Telephone

- | | |
|--------------------------------|-------|
| 1. Telephone Enquiry (Inland) | - 100 |
| 2. Telephone Enquiry (Oversea) | - 130 |
| 3. Telephone Fault Complaint | - 102 |

General Administration Department

- | | |
|---|----------------|
| 1. Yankin Township Administration Office | - 01-543334 |
| 2. Yankin Township Administration Officer | - 01-556208 |
| 3. Block (7) Administration Officer | - 09-443013561 |

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**Immigration**

- | | |
|---------------------------|-------------|
| 1. Yankin Township Office | - 01-556427 |
| 2. Yangon Airport Office | - 01-662659 |

Y.C.D.C

- | | |
|-------------------------------------|--------------|
| 1. Yankin Township Officer | - 01-566324 |
| 2. Yankin Township Cleaning Officer | - 09-5080598 |

Transport

- | | |
|-------------------------------|-----------------------------|
| 1. Yangon Airport | - 01-662811 |
| 2. Railways | - 01-202176, 202175, 374027 |
| 3. Shipping (Coastal Vessels) | - 01-382722 |

Embassy

Attach with Diplomatic List distributed by Government

Mercure Hotels Yangon Kaba Aye Crisis Management Committee

- | | | | |
|---|-----------------------|----------------|-----------------------|
| 1. The Decision-Maker - General Manager | - Mr. Richard Tin Tun | - 09260512552 | - HA3N7-GM@accor.com |
| 2. The Coordinator - Resident Manager | - Mr. Michael | - 09-43023856 | - HA3N7-GM1@accor.com |
| 3. The Recorder - ASSR Manager | - Mr. Toe Lwin | - 09-977827068 | - HA3N7-SE1@accor.com |
| 4. Spokesperson | - | | |
| 5. Member - DOSM | - Ms. Khin Kathi San | - 09-982931151 | - HA3N7-SM@accor.com |
| 6. Member - F/O Manager | - Mr. Naing Aung | - 09-253545302 | - HA3N7-FO@accor.com |
| 7. Member - Executive Chef | - Mr. Nyi Nyi Win | - 09-421168651 | - HA3N7-KC1@accor.com |
| 8. Member - Chief Engineer | - Mr. Moe Kyaw Naing | - 09-43107466 | - HA3N7-TE@accor.com |
| 9. Member - T&C Manager | - Ms. Naw Kabel Say | - 09- 5129526 | - HA3N7HR@accor.com |
| 10. Member - Exe; Housekeeper | - Ms. Cathrine | - 09-256083974 | - HA3N7-HK@accor.com |
| 11. Member - Financial Controller | - Ms. Kyi Kyi Swe | - 09-5137383 | - HA3N7-GL@accor.com |

HOD of Mercure Hotels Yangon Kaba Aye

- | | | | |
|--------------------------|-----------------------|----------------|---------------------|
| 1. General Manager | - Mr. Richard Tin Tun | - 09-260512552 | HA3N7-GM@accor.com |
| 2. Resident Manager | - Mr. Michael | - 09-43023856 | HA3N7-GM1@accor.com |
| 3. Director of Sales | - Ms. Khin Kathi Sann | - 09-982931151 | HA3N7-SM@accor.com |
| 4. Front Office Manager | - Mr. Naing Aung | - 09-253545302 | HA3N7-FO@accor.com |
| 5. Executive Chef | - Mr. Nyi Nyi Win | - 09-421168651 | HA3N7-KC1@accor.com |
| 6. Executive Housekeeper | - Ms. Cathrine | - 09-256083974 | HA3N7-HK@accor.com |
| 7. Communication Manager | - | | |
| 8. T&C Manager | - Ms. Naw Kabel Say | - 09-5129526 | HA3N7-HR@accor.com |
| 9. Assist; SSR Manager | - Mr. Toe Lwin | - 09-977827068 | HA3N7-SE1@accor.com |
| 10. Financial Controller | - Ms. Kyi Kyi Swe | - 09-5137383 | HA3N7-GL@accor.com |
| 11. Chief Engineer | - Mr. Moe Kyaw Naing | - 09-43107466 | HA3N7-TE@accor.com |

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External Contacts

Service providers

1. Elevator	- Mr. Aung Naing (Fortune Company)	- 09 5046346
2. Generator	- Mr. Mg Mg Gyi (Armahn Company)	- 09 5003881
3. LPG gas	- Myat Ta Gon Co;	- 09 975 207592
4. Diesel	- Mr. Win Zaw Thein	- 09 5013358
5. Rice	- Ayar Hinthar Company	- 09 421062193
6. Drinking Water	- Alpine Company	- 01 564498, 09 5120876
7. Food	- Ms. Ni (Crystal Supplier)	- 09 448004121

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SATELLITE TELEPHONE

HOTEL NAME: _____

Satellite telephone available at the hotel: YES/No

Satellite telephone available outside the hotel : YES/NO

☐ Storage location(address): _____

☐ Contact (Name of person in charge + Telephone no.): _____

Telephone make and model: _____

Serial no. (IMEI): _____

Network: ☐ INMARSAT ☐ THURAYA ☐ IRIDIUM ☐ Other (state which): _____

Telephone no.: _____

Device tests:

- | | |
|--|-------------------|
| <input type="checkbox"/> Device test date: _____ | Result: Pass/Fail |
| <input type="checkbox"/> Device test date: _____ | Result: Pass/Fail |
| <input type="checkbox"/> Device test date: _____ | Result: Pass/Fail |
| <input type="checkbox"/> Device test date: _____ | Result: Pass/Fail |

If a crisis situation occurs in a country with no satellite telephone, the Safety and Security Department has an emergency communication case available in Paris which can be urgently dispatched to a site. This emergency case contains:

- a satellite telephone
- office supplies
- a walkie-talkie
- electrical equipment (extension cables and adaptors)



Call transcription sheet

Sheet no. 1: Information request

Caller: ☐ Accor Hotels ☐ Media ☐ Institution
 ☐ Partner ☐ Other

If the caller is looking for a customer or employee, use sheet no. 2.

Date: _____ **Call received by:** _____

Time: _____ **Location:** _____

Hello,

I am from AccorHotels Group, how can I help you?

[Your caller tells you why they are calling.]

Do not say the Crisis Committee has met

If you have no objection, I'll note down the subject of your call, which will enable us to deal with it properly⁵:

What is your name? Could you spell that for me, please?

What company or department do you belong to? Where are you?

⁵ Write down exactly what you hear and note the words the caller uses. Whoever the caller is and the nature of the request, **do not transfer the call directly to the Emergency Response Committee unless you have received specific instructions to do so.**

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What telephone number can we reach you on, and when is a good time to call?

Repeat all information back to the caller so as be sure there are no mistakes.

Thank you for calling. I will immediately forward your request to a manager, and we will get back to you as soon as possible.

CALL TRANSCRIPTION SHEET

Sheet no.2: Request regarding a customer/employee

Call received by:		On	/	/	at	am/pm
-------------------	--	----	---	---	----	-------

CALLER	
Has called previously?	Yes <input type="checkbox"/> No <input type="checkbox"/>
SURNAME	
First name	
Number of people sought	
Connection to the person(s) sought	Family <input type="checkbox"/> Friend <input type="checkbox"/> Work <input type="checkbox"/>
Comments	
Home telephone no.	
Mobile telephone no.	
Other contact information	

It is important to state that only local and national authorities will be authorised to provide accurate information after making the necessary and essential checks.

PERSON SOUGHT (1 sheet per person)	
Person sought	Employee <input type="checkbox"/> Customer <input type="checkbox"/>
SURNAME	
First name	
Date of birth - Age	/ / - years
Sex	Male <input type="checkbox"/> Female <input type="checkbox"/>
Nationality	
Passport No.	
Mobile telephone no. of person sought	
Hotel at which staying/working	
<i>If request is regarding a customer:</i>	Internet <input type="checkbox"/>
Booking method	Travel agency <input type="checkbox"/>
	Company <input type="checkbox"/>
	Arrived without booking <input type="checkbox"/>
	Other:
Number of persons	

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accompanying	
Full names of persons accompanying	

Comments:

Questions asked	Follow-up actions



REPORT ON INITIAL INFORMATION

The person responsible for filling in this document is whoever is closest on the ground in a fit physical and psychological condition to do so

Recipients: <ul style="list-style-type: none"> Country/Region Crisis Committee members Worldwide Crisis Committee 	alert.hotline@accor.com
--	--

1 - Alert raised

Alert raised by (name): Company: Position: Telephone/fax numbers: Email:	Date: Time:
--	----------------------------------

2 - Information on the event location

Hotel name(s) and code(s): Management arrangement: Hotel manager(s):

3 - Brief description of the event

Business affected, facts, apparent cause, date, time and location of the event:
--

4 - Information available

		Comment
Impact on persons, property and business Number of deceased, injured and missing For each victim: ✓ identity (surname, first name, nationality, age, place of residence); ✓ status (customer, staff or third party); ✓ condition (deceased, injured or missing); ✓ number of persons accompanying (including children).		
Damage to property		
Risk of business interruption (closure, legal proceedings, etc.)?		
Current situation AccorHotels executives already alerted		

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((regional head office or AccorHotels Paris head office, etc.)	
Protective and emergency measures taken (site evacuation, security perimeter delimited, contingency plans implemented, others)?	
External interventions (emergency services attended, authorities, etc.)	
Third party reactions or interventions (local residents, authorities, interest groups, etc.)	
Media coverage Are there any journalists present? If not, are they likely to soon be alerted to the situation? Any interviews been given? If so, by whom (employees or third parties)?	
Other Foreseeable developments in the situation	
Risks and concerns	
Requests for extra resources	

5 - Recommended categorisation (Checkbox)

- ☐ Event managed directly on the ground
- ☐ Event managed by country/region head office ("country/region" crisis)
- ☐ Event handled by Global Head Office ("worldwide" crisis)



LOG BOOK

Event: _____

Page: __ / __

Date	Time	Issuer	Recipient	New information	Decisions proposed/taken	Person responsible for implementing decision(s)	Deadline	Complete yes/no/in progress

Note for users: alter column headings to match the desired objective

Update; 14-1-2020

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Appendix 18: YCDC Letter

တံဆိပ်

၂၂၀၀
စာအမှတ် / ပရောဂျက် / စည်ပင်-ယာ (ဆုံ)
ရက်စွဲ ၂၀၁၉ ခုနှစ်.....လ.....ရက်

မြို့နယ်.....
မြို့.....
ရပ်ကွက်.....

ကြောင်းအရ..... မြို့..... ကမ္ဘာ့ဆေး ဘုရား ၁၅၁

ရန်ကုန်တိုင်း..... ရန်ကုန်..... မြို့နယ်..... ကမ္ဘာ့ဆေး ဘုရား..... လမ်း..... မြေတိုင်းရပ်ကွက်.....
အမှတ်..... မြေကွက်အမှတ်..... ၁၅၁..... အဆောက်အအုံအမှတ်..... -..... တွင်.....
ထပ်..... နံပါတ် (ဟိုတယ်)..... အဆောက်အအုံအမှတ်..... စွဲပါစာအမှတ်.....
၂၂၀၀ / ၂၀၁၉ ငြိမ်းချမ်း စီမံအုပ်ချုပ်ရေး

နေထိုင်အသုံးပြုရန် ခွင့်ပြုလိုက်သည်။

ယူ စီမံအုပ်ချုပ်ရေး ကိုယ်စားလှယ်
ဧည့်သည် - ဆေးစစ်ဆေးမှု ဖြစ်ပါသည်။

ဧည့်သည်

ဦးစီး
ဌာနမှူး

သိသာရန်
ပေးပို့ပါသည်။

အုပ်..... မြို့နယ်.....

Appendix 19: Decision of the Myanmar Investment Commission

MIC Decision



Confidential

THE REPUBLIC OF THE UNION OF MYANMAR
MYANMAR INVESTMENT COMMISSION
No.1,Thitsar Road, Yankin Township, Yangon

Tel : 01-658129
Fax: 01-658137

Our ref : DICA-4/FI-317/2016(513-B)
Date : 30 March 2016

Subject: Decision of the Myanmar Investment Commission on the proposal for "Hotel and Service Apartment" under the name of "SCCP Prince Company Limited"

Reference: (1) Ministry of Construction Letter No.21/branch-2/MIC/2016 (C 348) dated (26-2-2016)

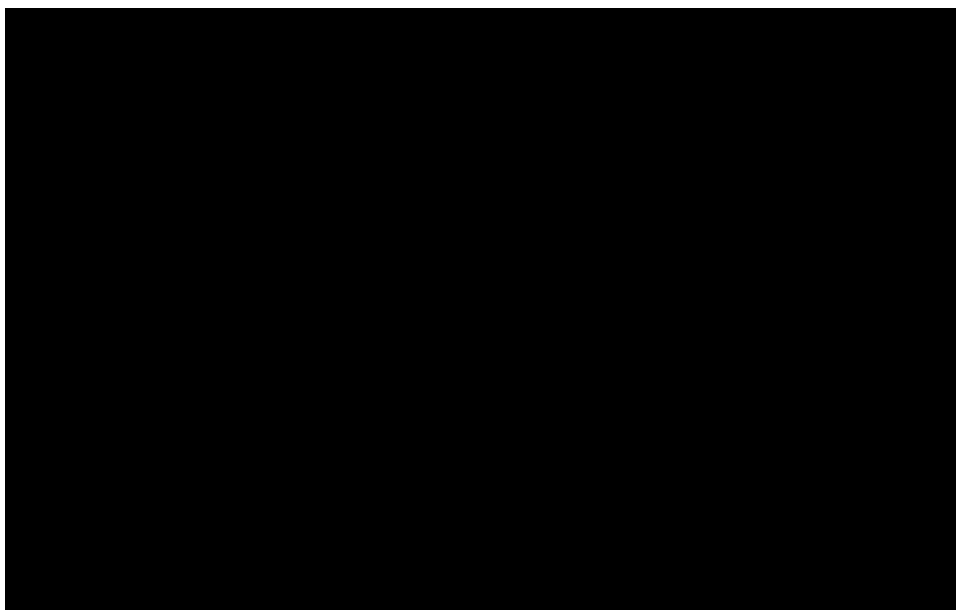
(2) SCCP Prince Company Limited Letter dated 24-5-2016

1. The Myanmar Investment Commission had issued the permit No.207/96 dated on 16th August 1996 to Micasa Hotel Ltd. for Services Apartment.
2. In addition, the Myanmar Investment Commission, at its meeting (10/2016) held on (18-3-2016) had approved the renewal of the tenure of the extension up to 50(fifty) years and the name of the economic organization to be formed in Myanmar be changed from "Micasa Hotel Ltd." to "SCCP Prince Company Limited" and also approved the name of promoter from Mr. Tan Boon Lee to Mr. Lee Chee Kian, submitted by SCCPRE TEN (S) PTE. LTD. of Singapore under the name of "SCCP Prince Company Limited" as a wholly foreign owned investment.
3. Terms and conditions for construction of new building and continue operation of hotel and service apartment are stated in the following paragraphs.
4. The permitted duration of the whole project shall be initial 50 (fifty) years and extendable for 10 (ten) years in 2 (two) times commencing from the date of issuance of the Myanmar Investment Commission's permit up to 31st December 2048. The permitted duration and the leased period for the renewal of the tenure of the extension up to 50(fifty) years and extendable two consecutive terms of 10(ten) years commencing from the opening date of 1st January 1999 in accordance with the Deed of Assignment of BOT Contract & Lease Agreement, Deed of Amendment of BOT Contract and Lease Agreement signed between Micasa Hotel Ltd., SCCP Prince Company Limited and Department of Urban and Housing Development; "Micasa Hotel Ltd." be changed to SCCP Prince Company Limited". On the expiry of the lease period, SCCP Prince Company Limited shall transfer the hotel and service apartment together with material assets

Confidential

Confidential

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21. SCCP Prince Company Limited shall be responsible for the preservation of the environment at and around the area of the project site. In addition to this, SCCP Prince Company Limited shall carry out as per instructions made by Ministry of Natural Resources and Environmental Conservation in which to conduct Initial Environmental Examination (IEE) process and an Environmental Management Plan (EMP) which describe the measure to be taken for preventing, mitigation and monitoring significant environmental impacts resulting from the implementation and operation of proposed project or business or activity has to be prepared and submitted and to perform activities in accordance with this EMP and to abide by the environmental policy, Environmental Conservation Law and other environmental related rules and regulations.

22. SCCP Prince Company Limited shall have to abide by the Fire Services Department's rules, regulations, directives and instructions. Moreover, fire prevention measures shall have to undertake such as installation of Fire Alarm System, Fire Detection System and Fire Fighting System.

23. SCCP Prince Company Limited shall have to allocate 2 % (two percent) of the annual net profit from the business for the Corporate Social Responsibility (CSR) activities.

24. Payment of principal and interest of the loan (if any) shall be made out of the services income of SCCP Prince Company Limited.

Confidential

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25. SCCP Prince Company Limited in consultation with Myanmar Insurance, shall effect such types of insurance defined under Chapter XII, Rules 79 and 80 of the Foreign Investment Rules.

26. Hence, the "Substituted Permit" is herewith issued in accordance with Chapter VII, Section 13(b) of the Republic of the Union of Myanmar Foreign Investment Law and Chapter VIII, Rule 48 of the relating to side Law. This Substituted Permit shall be superseded for the Micasa Hotel Ltd. Micasa Hotel Ltd. shall have to return the permit No. 207 /1996 dated on 16th August 1996 to Commission and also shall have to abide terms and conditions stated on MIC's letter No.YaKa-1/317/96 (0670) dated on 16th August 1996.



(Aung Naing Oo)
Secretary

SCCP Prince Company Limited

- cc: 1. Ministry of Foreign Affairs
2. Ministry of Electricity and Energy
3. Ministry of Home Affairs
4. Ministry of Transport and Communications
5. Ministry of Natural Resources and Environmental Conservation
6. Ministry of Labour, Immigration and Population
7. Ministry of Commerce
8. Ministry of Planning and Finance
9. Ministry of Hotels and Tourism
10. Office of the Yangon Region Government
11. Director General, Department of Electric Power Transmission and System Control
12. Director General, Directorate of Environmental Conservation
13. Managing Director, Myanmar Electric Power Enterprise
14. Director General, Immigration and National Registration Department
15. Director General, Department of Trade
16. Director General, Customs Department
17. Director General, Internal Revenue Department
18. Managing Director, Myanmar Foreign Trade Bank
19. Managing Director, Myanmar Investment and Commercial Bank
20. Managing Director, Myanmar Insurance

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Confidential


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21. Director General, Directorate of Investment and Company Administration
22. Director General, Directorate of Labour
23. Director General, Department of Urban and Housing Development
24. Chairman, Myanmar Tourism Federation
25. Chairman, Republic of the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI)


Confidential


Appendix 20: Hotel License

Hotel license

 **ပြည်ထောင်စုသမ္မတမြန်မာနိုင်ငံတော်**
ဒေသဆိုင်ရာခရီးသွားလုပ်ငန်းကော်မတီ
ရန်ကုန်တိုင်းဒေသကြီး



 **ဟိုတယ်လုပ်ငန်းလိုင်စင်**





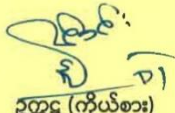
လိုင်စင်အမှတ် H(YGN)-0066(Ext:)
ထုတ်ပေးသည့်နေ့စွဲ 14. 12. 2018

၁။ ရန်ကုန်တိုင်းဒေသကြီး YANKIN မြို့/မြို့နယ်ရှိ ဦး/ဒေါ်/အဖွဲ့အစည်း
S C C P PRINCE CO.,LTD (နိုင်ငံသားစိစစ်ရေးကတ်အမှတ်/အမျိုးသားမှတ်ပုံတင်အမှတ်/
အဖွဲ့အစည်းမှတ်ပုံတင်အမှတ် 3 9 5 FC/2015 - 2016 (YGN)) ကို အောက်ပါလုပ်ငန်းဆောင်ရွက်နိုင်ရန်
အတွက် လုပ်ငန်းလိုင်စင် ခွင့်ပြုလိုက်သည် -

(က) လုပ်ငန်းအမည် Mercure Yangon Kaba Aye (184) Rooms
(ခ) လုပ်ငန်းအမျိုးအစား HOTEL BUSINESS
(ဂ) လုပ်ငန်းဌာန/နေရပ်လိပ်စာ NO. 17, KABA AYE PAGODA ROAD , YANKIN TOWNSHIP ,
YANGON DIVISION.
(ဃ) လုပ်ငန်းရုံးခွဲလိပ်စာ

၂။ လိုင်စင်သက်တမ်းကုန်ဆုံးသည့်နေ့ 13. 12. 2021

၃။ လုပ်ငန်းလိုင်စင်ရရှိသူသည် ပူးတွဲပါစည်းကမ်းချက်များကို လိုက်နာရမည်။

  
ဥက္ကဋ္ဌ (ကိုယ်စား)
(နိုင်ငံခြား၊ အတွင်းရေးမှူး)
၇၆

ဟိုတယ်လုပ်ငန်းလိုင်စင်ဆိုင်ရာ စည်းကမ်းချက်များ

- ၁။ လုပ်ငန်းလိုင်စင်ကို ဟိုတယ်၏ ဧည့်ကြိုကောင်တာ သို့မဟုတ် ထင်ရှားမြင်သာသောနေရာတွင် ချိတ်ဆွဲတပ်ဆင်ထားရမည်။
- ၂။ ဤလိုင်စင်ဖြင့် ခွင့်ပြုသော လုပ်ငန်းကိုသာ လုပ်ကိုင်ရမည်။
- ၃။ လိုင်စင်တွင် ဖော်ပြထားသည့် အမည်မှတစ်ပါး အခြားအမည်ဖြင့် လုပ်ကိုင်ဆောင်ရွက်ခြင်း မပြုရ။
- ၄။ လိုင်စင်ကို အခြားသူအား လွှဲပြောင်းပေးခြင်း၊ ရောင်းချခြင်း၊ အပ်နှံခြင်း မပြုရ။
- ၅။ ပျက်ပြယ်သောလိုင်စင်ဖြင့် လုပ်ငန်းကို ဆက်လက်လုပ်ကိုင်ဆောင်ရွက်ခြင်း မပြုရ။
- ၆။ ဟိုတယ်ပရိဝုဏ်အတွင်း ဥပဒေနှင့်အညီ လုပ်ကိုင်ခွင့်ပြုထားသော လုပ်ငန်းများကိုသာ ဆောင်ရွက်ရမည်။
- ၇။ ဟိုတယ်ပရိဝုဏ်အတွင်း မူးယစ်ဆေးဝါးရောင်းဝယ်ခြင်း၊ သုံးစွဲခြင်းနှင့် အခြားတည်ဆဲဥပဒေများနှင့် ငြိစွန်းသည့် ကိစ္စရပ်များပြုလုပ်ခြင်း မပြုရ။
- ၈။ ဟိုတယ်ပရိဝုဏ်အတွင်း ပြည့်တန်ဆာလုပ်ငန်းနှင့် ပတ်သက်သည့် လုပ်ငန်းရပ်အား ပြုလုပ်ခြင်း၊ အားပေးကူညီခြင်း မပြုရ။
- ၉။ နိုင်ငံခြားငွေကြေးများကို ကိုင်ဆောင်ခြင်း၊ ရောင်းဝယ်ခြင်းများအား တည်ဆဲဥပဒေနှင့်အညီ ဆောင်ရွက်ရမည်။
- ၁၀။ နိုင်ငံတော်၏ တည်ဆဲဥပဒေများကို ဖောက်ဖျက်ကျူးလွန်ခြင်း၊ ဖောက်ဖျက်ကျူးလွန်ရန်အားပေးကူညီခြင်း မပြုရ။
- ၁၁။ မြန်မာနိုင်ငံ ခရီးသွားလုပ်ငန်းဥပဒေနှင့် နည်းဥပဒေများအရ ဖွဲ့စည်းတာဝန်ပေးထားသော စစ်ဆေးရေးအဖွဲ့၏ စစ်ဆေးခြင်းကို ခွင့်ပြုရမည်။
- ၁၂။ လုပ်ငန်းလိုင်စင်နှင့် ဟိုတယ် ပိုင်ဆိုင်မှုအတွက် အငြင်းပွားမှုများ ဖြစ်ပွားပါက သက်ဆိုင်ရာ တရားရုံးဆုံးဖြတ်ချက်နှင့်အညီ အရေးယူဆောင်ရွက်မှုကို လိုက်နာရမည်။

Appendix 21: Health and Safety



YANGON KABA AYE

HEALTH AND SAFETY POLICY

SEPTEMBER, 2019

SAFETY, SECURITY & RISK DEPARTMENT

SAFETY, SECURITY & RISK DEPARTMENT

Health and Safety Policy

Preamble

The Management consider its customer and employees to be its most valuable assets and undertakes to safeguard them through providing and maintaining as far as reasonable practical a working environment that is safe and without risk to the health of its customers and employees. In ensuring a safe and health working environment all employees of the departments have to work closely together with the management in minimizing any risk that might jeopardize the health and safety of the guest and employees.

The hotel industry is an important industry closely linked to tourism, business travel and conventions, with form a significant part of the economy. The industry provides employment for a large number of people, both direct employees as well as part-time and contract staff. There are several main departments performing different function within a hotel. Eg; Housekeeping, Front Office, Food and Beverage, Kitchen, Stewarding, Safety Security & Risk and Engineering.

In providing a high standard of service to customers, the pace of work can be fast and the working hours long. Providing a safe and healthy working environment contributes to the well-being, morale and productivity of employees.

Hotel employ a variety of staff including Room Attendants, Bellmen, Front Desk, Chefs, Waiters, Laundry, Banquet, Security and Engineering. They can be exposed to a variety of health and safety hazards at work depending on the specific tasks that they perform. Hotel staff may be exposed to the risk of musculoskeletal disorders and injuries and to health hazards such as chemical, noise and thermal stress. There is also the risk of accidents from slips, trips, knocks and falls, cuts, burns and scalds, electrocution and fire and explosion.

Objective

Occupational accidents and diseases can result in suffering, sickness absenteeism, productivity loss, disability or even death. All these can be prevented;

- Identification of work hazards and their work place for prevention.
- Establishment of safety and health programmes.
- Reduce risk and prevent injury and loss through damage.

- Identify and manage potential hazards in order to effectively control the risks.
- Works to safety standards consistent with statutory requirements and good working practice.
- Review and develop these standards continuously, revising them in accordance with changes in legislation, SOP, practice and requirements.
- We are committed to consultation with employees on health, safety and welfare issues by.
- Ensuring that our employees understand and carry out their responsibilities. This will involve, but not be limited to, selection, training, re-training and continuous assessment of employee performance.
- Continually monitoring and reviewing the policy and its effectiveness in the workplace.
- Complying with all applicable health and safety laws, regulations, standards and other.
- Providing safe material and equipment.
- Implementing risk and hazard management system with are relevant and suitable for the organization risk exposure as well as identify, promote and continuously improve health and safety performance.
- Ensuring all managers remain directly responsible and accountable for the health, safety and welfare of their employees and provide adequate resources to assist manager in the cause.
- Provision of appropriate health and safety training to all relevant persons.
- Utilising appropriate internet and external expertise when required in all related activities.
- Establishing clear targets and objectives on a biennial basic to improve health and safety in the workplace.
- Maintaining a positive safety culture though encouraging active participation, consultation and cooperation of all the guest, employees, contractors and visitors in promoting and developing measures to improve health and safety at work.
- Actively responding to and investigating all incidents, and ensuring injured employees are returned to suitable work at the earliest possible opportunity through equitable claims management and rehabilitation practices.

Health and safety Committee

The management encourages to develop and implement a comprehensive safety and health programme to prevent workplace accidents and work-related illnesses, and to establish a safe and health working environment.

Health and Safety Committee was formed in every year as follow

Safety, Security and Risk Manager	- Chairperson
Chief Engineer	- Voice Chairperson
T & C Manager	- Secretary
Front Office Manager	- Joint Secretary
Director of Marketing	- Spokesperson
Other Departmental senior staff	- Members

The committee meeting will be held two times a year. Committee members discuss in the meeting about safety precaution, how to reduce a risk and hazard, how to educate Health and Fire knowledge for

all staff. FSC conduct fire drill and practical fire fighting for all staff after meeting. Involvement of management and all staff in safety and health activities. Giving recognition to safety in work performance review. Giving praise to employees who safety and counseling those who do not. Employees should understand that safety and health is not just the responsibility of the management, but they too have a role to play. A proactive response to safety and health in the workplace occurs before and accident has occurred. Reactive safety programs always cost much more than proactive programs always because they aren't implemented until an injury or illness has occurred.

HEAT (Hotel Emergency Action Team)

Heat members

- Duty F / O assistant manager
- Duty Security Supervisor
- Duty Engineering Staff
- Duty Housekeeping staff

If receive an emergency information by the phone, Operator or Security to take down the following:

- Name, position and department
- Location of fire or emergency
- Extent of fire or emergency

Operator and Security will inform **HEAT** member who respond immediately for emergency situation.

Health

All employees must be happy to work in a good healthy environment. T&C Department will responsible for a good healthy employee and environment.

- T&C Department implement to contract suitable clinic for medical care and emergency of the staff.
- The staff can take medical care at the contract clinic when they sick or emergency.
- T&C Department Implement that all employees have to take medical test before hire.
- They will lose their position if their medical test is unfit or something wrong.
- They have to take a rest and medical treatment at their home if their medical test is unfit or something wrong.
- They will return to their position if they will recovery.
- To check a staff canteen menu for hygiene and healthy food.
- To establish medical welfare of social security board for all staff according to the law of SSB.
- To check staff personal hygiene and uniforms which will neat and tidy.
- To provide first aid box and instruments for guest and staff emergency.
- To be careful that in order to achieve a good health and safety workplace.

Work Requiring Safe Work Procedures

Safe Work Procedures should be compiled in each departments for their workplace and follow it.

Training

Health and Safety training is important in providing staff with the knowledge and skills to work in a safe manner. A programme to identify the safety training needs for each department and each level to staff is useful for making training plans. Eg ; Healthy Education, First Aid, Fire Prevention, Disaster, etc. Safety training can be incorporated into the operation training of the staff. Such training can be carried out on the job, by training manager, or supervisor and external trainers. Each departmental safe work procedures will be trained by each HOD or Supervisor. Training records should be kept and reported to the General Manager.

Health and safety training be conducted as following:

- During orientation period for new employees
- When new equipment to processes are introduced
- When staff are transferred to another department
- Periodically for existing staff
- When the government alert for health and safety emergency

Health and Safety promotion

The management should establish promotional programmes to create safety and health awareness, and build a strong health & safety culture at the workplace as following:

- Health & Safety Talks and seminars
- Health & Safety Campaigns
- Health & Safety Exhibitions
- Newsletters on the notice board
- Posters & Pamphlets on the notice board

Evaluation, Selection and Control of Contractors

The contractors were allowed to work in a hotel premises with a contract or working permit before by the Chief Engineer and SSR Manager should establish a system to evaluate, select and control contractors. Such a system allows SSR Department to assess contractors based on their safety policy and procedures, safety performance records, safety training and competency records, before any work is awarded.

Hazard

Any Workplace condition or a person's "state of being" that could cause an injury or illness to an employee.

- Elimination
- Substitution
- Engineering or Health controls
- Administrative controls
- Personal protective equipment (PPE)

The hazard can be evaluated to control the hazards. Before implementation, it is advisable to test the feasibility of the recommended measures. Hazard analysis is also useful in the development of safe work procedures.

Workplace Hazards and Control

Work-related injuries and diseases occur as a result of unsafe acts and conditions. Unsafe acts occur when employees are unaware of the hazards and the proper work practices. They act not adopting the proper lifting methods or not using gloves when handling chemicals.

Work-related accidents and diseases can be prevented by first identifying the hazard and then taking the that could be taken are described.

Chemical Hazard

In hotel, chemical are used mainly for cleaning. Persons at risk include housekeepers, steward, laundry and engineering staff.

Some chemical are hazardous and may be corrosive, irritating, toxic, flammable, reactive or carcinogenic. Direct skin contact with some chemicals may cause burns or skin rashes from irritation or allergy. Chemical spills and splashes may damage the eyes. Volatile chemicals such as solvents such as solvents can be inhaled. High concentration of vapor of gas can accumulate particularly in poorly ventilated and confined areas. It is therefore important that employees who work with chemicals are aware of the hazards and adopt safe work practices to avoid chemical exposure.

Safe Work practices for Hazardous Chemicals

- Use less harmful substances
- Provide proper ventilation though open windows or mechanical air vents
- Wear suitable personal protective equipment (PPE e.g Mask, Goggles, Gloves and clothing, eyewashes)
- Do not allow unauthorized access to stored chemical
- Inspect chemical stores regularly to check for deterioration or leakage
- Ensure that every chemical has a **Material Safety Data Sheet**
- **Safety Data Sheet** must be readily available in a non-emergency
- **Safety Data Sheet** must be immediately accessible in an emergency
- Provide awareness of **Material safety Data Sheet** for using staff
- Arrange for annual medical test for using staff
- Chemical containers must be properly labeled
- Be careful chemical do not effect environment

Noise Hazard

Although the hotel environment is generally quiet, there are certain areas where staff (Engineering, Housekeeping) may be exposed to a noise hazard eg, Generator Room and Laundry Room. Long term

exposure to excessive noise may lead to hearing loss. To prevent hearing loss, a person should not be exposed to noise levels exceeding for 8 hours a day or its equivalent. Where the permissible exposure taken to reduce the noise exposure.

Some Noise Control Solutions

- Replace noisy machinery
- Locate noise sources away from hard walls or corners
- Isolate or enclose noise source
- Construct suitable noise enclosures or barriers
- Line interior surface with sound absorbing materials
- Maintain machinery and equipment at regular intervals
- Wear ear plugs or ear muffs
- Turn down the volume of amplifiers

Thermal Stress

Staff working in the kitchen, laundry and generator room may be subjected to heat stress from the machinery or equipment used in these areas. This can lead to headaches, fatigue and discomfort.

Preventing Heat Stress

- Improve the ventilation through a carefully planned and laid out exhaust and air conditioning system
- Implement and follow an appropriate work-rest schedule
- Avoid thick clothing
- Drink plenty of water to replenish water lost through dehydration

Staff can also be exposed to cold temperatures while retrieving or storing items in cold storage room (Kitchen or Main Store). They should wear warm clothing while working in such cold environments.

Cuts

Cuts may occur from the use of knives and machinery in kitchen, Laundry and engineering. Cuts may also arise from handling broken glass or porcelain by room attendants or F&B service.

Machinery use in the kitchen and laundry like mincers, food mixers, meat slicers and ironing machines should be properly guarded. Where this is not feasible, sensor or two-hand controls can be used. A guard that is provided but not put in position would not serve its intended purpose. Regular maintenance would also reduce accidents that result from faulty machinery. Staff should be encouraged to maintain good housekeeping at the workplace.

Use Machinery with Care

- Refrain from wearing loose or frayed clothing or jewellery that could get caught
- Do not remove any safety interlocks and safety guards from machinery
- Do not try to reach into any moving parts of the machinery with your fingers

- Do not clean blades unless the power has been shut down
- Follow the operation instruction and SOP as recommended by the manufacturer or supplier
- Ensure that safety guards are in place before operation any machinery
- Use a pusher or tool to avoid contact with moving parts of machinery
- Switch off or unplug the machine before removing the safety guards for retrieval or cleaning

Use knives with Care

- Use the right knife for the job
- Use a flat surface or cutting board
- Make sure the knife is sharp
- Store knives securely in proper racks in a visible place
- Cut away from your body when cutting , trimming or de-boning
- Curl the finger of the other hand over the object to be cut
- Wear protective equipment such as mash gloves if necessary
- Wash and clean sharp tools separately from other utensils

Burn and Scalds

The use of ovens and deep fryers without due care can cause severe burns and scalds. Kitchen staff should be educated on the possible hazards and the preventive measures that could be taken while handling such appliances or hot liquids.

Handle Hot Items with Care

- Organize your work are to prevent contact with flames and hot objects
- Use the correct gloves for handling hot objects
- Ensure safe levels of hot liquid like oil or boiling water
- Do not use a wet cloth to lift lids from hot pots
- Ensure that the handles of pots and pans do not stick out from the counter or stove
- Make use of safety devices like thermostats and interlocking switches in ovens
- Do not overfill pots and pans
- Do not open cookers and steam ovens that are under pressure
- Open hot water and hot liquid faucets slowly to avoid splashes
- Do not handle hot items with your bare hand
- To put a label of hot liquids on the hot pot or pan

Trips and Falls

Many workplace injuries also result from workers tripping over physical obstruction or falling from height. This could be due to insufficient lighting, poor housekeeping, wet and slippery floors, a lack of guardrails or handrails on platform or staircases, unsafe use of ladders or carelessness.

Preventing Trips and Falls

- Report poor lighting
- Keep floors and stairs dry clean

- Ensure carpets and rugs are free of holes and loose edges
- Hang power cords over aisles or work areas to prevent tripping accidents
- Make use of anti-slip flooring or non-slip working shoes (Safety Shoes)
- Ensure elevated platforms are guarded against the fall of persons. Where physical guards are not feasible, provide alternatives like safety harnesses
- Do not leave materials and boxes lying haphazardly around
- An elevators were maintained regularly and provide awareness to the guest and staff how to do if they are tripping in an elevator
- Security staff have to know how to do if someone is tripping in an elevator

Safe use of ladders

- Inspect the ladder before and after each use
- Do not use defective ladders eg< Broken or missing rungs: lose hinges or missing screws or bolts
- Set ladder on a flat firm surface, stable surface, using slip-resistant feel or secure blocking or have someone to hold the ladder
- Face the ladder when standing on it and when climbing up or down
- Keep the center of your body within the side rails
- Set up barricades and warning signs when using a ladder in a doorway or passageway
- Do not stand on the top two rungs of the ladder
- Extend the ladder at least 3 feet above the roof
- Use Personal fall Arrest system if necessary

Struck Against / By Objects

Injuries can occur when persons are hit by hard, heavy or sharp objects. When materials are not properly stacked they may collapse, causing injuries to persons nearby. Narrow and cluttered passageways can contribute to the risk of such accidents. When trolleys and carts are not handled with care, accidents may also arise.

Hotel staff who have in areas where there is frequent use machinery of hot substances should be provided with the necessary personal protective equipment (PPE).

Protect Your Hand and Feet

- Ensure goods and materials are stacked in a safe manner
- Make use of the correct personal protective equipment (PPE)
- Do not rush through swing door, especially with trolleys

Electrocution

Electrocution occurs when the human body becomes part of an electric circuit through which current passes. Electrical equipment and appliances should be regularly inspected by a qualified electrician to ensure that they remain in good working condition and will not pose a danger to unsuspecting staff. Extreme care should be taken in workplaces where workers come into contact with fluids that may be good conductors of electricity. Examples include kitchens, laundry and hotel rooms where electrical appliances may be used for cleaning work.

Handle Electrical Appliances with Care

- Report any damaged plug, wires, electrical equipment
- Keep power cords away from heat, water and oil
- Do not clean electrical equipment with flammable or toxic solvents
- Do not overload electrical points
- Pull the electrical plug, not cord
- Provide a system for inspection and maintenance of electrical appliances
- Establish a set of lockout-tag out procedures for the repair and maintenance of electrical
- Use standard and good quality electrical tools
- Engineering staff have to educate how to use the equipment and tools in maintenance of electrical appliances

Fire and Explosion

There is a risk of fire and explosion in workplace which use flammable substances (LPG Gas or some chemical) or high-pressure application eg > Kitchen, laundry. Improper usage or faulty electrical installations could also result in fires.

Air receivers are also used in the engineering work. These pressure shall be regularly inspected as required by law. Regular maintenance and checks should also be carried out by the engineering staff.

Safe Use of pressure Vessels

- Ensure air or steam receivers are inspected at least once 24 months by an Authorized Inspector.
- Ensure engineer staff were provided properly training for air receivers
- Provide PPE for engineer staff when they use air receiver

SSR Department conducts regular fire drill to familiarize hotel staff with the evacuation and rescue procedures in time of emergency. Sufficient fire-fighting equipment like fire extinguishers and sprinkler system should be maintained regularly. Fire escapes and exits should also be properly marked and kept free from obstruction.

Contagious Disease

The customer or employee showing symptoms or suffering from a contagious infectious disease (HIV, SAR, Bird Flu, Zika)

- Isolate those taken ill
- Identify the staff (F/O, Security, Housekeeping) likely to have been in contact with those taken ill
- Identify the staff to use medical preventive equipment (mask, glove) when they touch with those taken ill
- Restrict access to places likely to be contaminated. (eg. The customer's room)
- Report to the Township Department of health
- Notify the relevant doctor
- Ask a doctor to come, or contact the Township department of Health office
- SSR manager to greet and guide the emergency service (doctor on call, Ambulance) and authorities
- Collect key information about those taken ill (name, address, people to contact, medical information etc)

- Ensure family, friends are looked after especially children, dependent adults and disable person if they are in the hotel
- Communication manager Contact to their Embassy or Company
- T&C Manager will contact to their family if the victim is employee
- Ensure the victim's personal effects are kept securely
- The staff keep the facts to prevent rumours
- Remind them to make no comment if asked questions by the media or other customers

Maintenance Programme

An effective maintenance programme should be established for all equipment, machinery and tools used. This will help prevent accidents resulting from the failure of such equipment and machinery.

Musculoskeletal Injuries and Disorders

Musculoskeletal Injuries can be occurred hotel staff as following when they do unsafe acts:

- **Awkward postures**

Awkward postures include bending the back during bed making or working with the arms above shoulder height during cleaning and stretching to reach across the table to get and item.

 - Employees should be worked smart according to SOP, don't be hurried
- **Manual Handling**

Heavy or Frequent lifting, pushing, pulling or carrying puts a strain on the back and also the upper limbs. Back injuries and other musculoskeletal sprains and may occur among bellman, housekeepers, laundry and kitchen staff.

 - The staff to know the weight of property and moving route when they lift it.
 - The staff to close with the property when they lift it.
 - Upper body is vertical position on the ground (90).
 - The force is base on the legs, foots, arms, and hands when they lift it, do not base on the waist or back bone.
- **Prolonged standing**

Prolonged standing for many hours can contribute to lower limb and pain. Most of the jobs in the hotel involve standing work for many hours.
- **Repetitive movements**

Repetitive use of the hand and upper limb may result in pain the wrist, elbow and shoulder. Persons at risk include room attendants, laundry and kitchen staff.

Recovery from some of these injuries may take time and further injury may occur, marking the problem worse. Therefore it is important to identify the risk factors and take preventive action to minimize the risk. Most of the problems can be prevented through the application of good ergonomic practices.

❖ Good Ergonomic Practices for Bellmen

This can cause strain and injury to the back, shoulders and hands if the loads or frequency is excessive or if incorrect lifting methods are used.

Lifting luggage from the trunk of a car

- Plan your lift
- If it is too heavy, get a colleague to help
- Get close to the load. Pull bags from the back of the trunk close to you
- Face the trunk squarely with both feet firmly on the ground
- Bend your knees not the back

General Luggage Handling

- Use ramps or elevator rather than stairs
- Use trolley for heavy luggage or when carrying over long distance
- Push rather than pull trolleys
- Ensure trolleys are properly maintained eg: tires are fully inflated and wheels aligned
- Wear proper shoes
- Keep correct lifting methods

❖ Good Ergonomic Practices for Room Attendants

Room attendants are subject to strains from repeated lifting, pushing, bending , reaching and wiping when making bed, cleaning bathrooms, vacuuming, wiping furniture and pushing carts. They should be provided appropriate equipment and training in proper work methods and postures to reduce the risk of strains and injuries.

Making Beds

- Bend your knees, not your back
- Kneel and do one side of the bed each time
- Avoid bending back when changing pillow cover or duvet covers

Cleaning Furniture

- Use a long handed tool or stand on a step-ladder to reach high furniture or lighting
- Kneel when cleaning low furniture

Vacuuming carpets

- Use vacuum cleaners which are light-weight and easy to use
- Avoid bending the back by kneeling when vacuuming under furniture

Housekeeping carts

- Carts should not be overloaded, stable and easy to move and not obstruct vision
- Push rather than pull carts
- When pushing a cart, place your hands just below shoulder level on the cart handle
- Ensure carts are maintained in good working condition. Wheels should be aligned and turn smoothly
- Report any faulty carts to your supervisor

Cleaning Bathrooms

- Kneel to clean the floors to avoid excessive back bending
- Kneel next to the bath tub to avoid excessive back bending and arm reaching when cleaning the tub
- Use tool with long handles for hard to reach areas

❖ Good Ergonomic Practices For F&B Service

F&B Service and banquet staff routinely carry trays of dishes or glassed, bend and reach to clear, wipe, set tables and serve customers at tables. Banquet staff carry heavy tables, chairs and other equipment in the setting up of a function room. Heavy repetitive lifting and awkward postures can put a lot of strain on the back, neck, shoulder arms and hands.

Carrying large Trays

- Balance the load and keep the tray dry and clean
- Carry most of the load over the shoulder
- Use both hands to support and balance the tray
- Use tray carrying carts where possible
- Carry fewer plates at a time

Carry Small Trays of Drinks

- Carry a loaded tray with your shoulder, arm and hand in a neutral position
- Carry the tray on both your arm and hand
- Balance the load and place heavy item close to the center

Serving Drinks or Food

- When pouring, move the glass or cups as close to you as possible to avoid over-reaching
- Keep the shoulder, elbow and wrist in neutral posture wherever possible
- Move around the table to serve guests

Carrying Tables and chairs

- Use trolleys wherever possible
- Ensure a good grip when carrying
- Carry close to the body
- Avoid bending or twisting the back
- Restrict number of chairs stacked together
- Have two or more people to carry heavy or bulky items

❖ **Good Ergonomic Practices for Kitchen Staff**

Kitchen staff are involved in food transfer, preparation (cutting, mixing, grinding, arranging) and cooking or baking. Stewards work in the kitchen area to clean utensils, plates and trays. The work involves awkward postures, prolonged standing, manual handling and repetitive hand motions. These can give rise to sprains and injuries involving the hands, shoulder, back and neck.

Handling and transferring food

- Use trolleys wherever possible for heavy items
- Provide tables, counters and trolleys of the same to be slid across
- Use two persons for lifting heavy items
- Store heavier and more frequently used items on mid-level shelves

Food Preparation and Cooking

- Use a work surface that is waist level for forceful tasks (e.g. chopping)
- Use a work surface that is elbow height for finely detailed work (e.g. creaming cake)
- Stand close and use the front of the work surface to avoid over-reach
- Avoid twisting back
- Position frequently used ingredients close to your work area and at a convenient height
- Select utensils designed to reduce awkward postures and force (e.g. good grip)

- Use the compartments in the oven that are between the waist and shoulder level
- Use automated equipment (e.g. food processors)

Dish Washing

- Stand close to work surface
- Avoid twisting or bending back
- Hold the rinse nozzle at mid-body height to reduce reach
- Use a platform to reduce depth of deep sink to reduce bending

❖ Good Ergonomic Practices for laundry Staff

The operation in a hotel laundry include sorting, washing, drying, folding of linens as well as washing, drying and ironing of uniform and guests laundry. The handling of the laundry requires considerable force and some tasks may repetitive and involve awkward postures and prolonged standing. This can be stressful and the hands, wrist, back, shoulders and limbs.

Sorting and Washing

- Reduce amount of manual handling of laundry through design of work flow or automation eg. Washing machines with can be tilted for loading or unloading of laundry
- Use bins with a self-elevating bade to reduce bending to retrieve laundry from the bottom of the bins
- Use lighter bins with wheels designed for hard floors to reduce pulling and pushing force
- Get colleague to help if load re heavy
- Maintain the bins regularly with particular attention to the wheels

Drying and Folding

- Repetitive work and awkward postures are the main risk factors
- Reduce awkward body postures such as reaching above shoulder level or bending the back while feeding the dryer
- Reduce the distance that separates the worker from the dryer to reduce reaching forward
- Provide a foot bar to allow the worker to switch the weight of the body from one foot to the other
- Use anti-fatigue matting and provide shoes with good insoles to reduce discomfort due to prolonged standing

Ironing and Packing

- The main risks are prolonged standing and awkward postures
- Reduce awkward body postures such as neck bending downwards and reaching to hang ironed clothes
- Practice job rotation or vary job tasks during the shift
- Redesign the hanger to be at a lower position (i.e shoulder level) to reduce excessive reaching and working overhead
- Take regular breaks and perform stretching exercises
- Provide anti-fatigue mats and shoes good insoles

Emergency Preparedness

The establishment effective implementation of an emergency response plan is crucial in saving lives and mitigating losses should an emergency situation arise.

All fire fighting and safety equipment are checked regularly which are ready to use anytime.

An Emergency Response Team (**HEAT**) and Fire Fighting team (Security Staff and Engineering Staff) should also be ready anytime and established with the duties and responsibilities of each member clearly defined.

SSR Manager should ensure that all staff (Especially HEAT team and Fire Fighting Team) are familiar with the plan and procedures in the event of an emergency. Regular drills and exercise should therefore be conducted. An evaluation of the drill performance should be carried out and lessons learnt used for improving the plan. Following should be included in an **Emergency Response Plan**.

- **Procedures for the raising of alarm**
- **Procedures for the evacuation and rescue of victims**
- **Provision of the means of rescue and first aid**
- **Provision of a mean of communication with the relevant government authorities and response agencies.**

Communications

- The designated Communication Centre is the Business Centre.
 - Hotel management used by telephone (including satellite phone), Walkie-Talkie and Special messenger in emergency.
 - During an emergency, spokespersons should be limited to the minimum. This is to avoid confusion, with could arise if there are too many communications pf information.
 - It is recommended that General Manager takes on the top role of spokesperson. In the General manager Absence, Resident Manager should act on his behalf.
 - Other spokespersons may be nominated, as required, by the General Manager, but only to address specific audience such as in the roles defined below.
- | | |
|-----------------------------------|--|
| ➤ GM | - Primary spokesperson / All including Media / Embassy
- Owner liaison / Head Office / Country / Region Head Office |
| ➤ Director of sale | - Travel & Tour company / Agency, Client, In-house Guest Company |
| ➤ Safety, Security & Risk manager | - Army / Law Enforcement Authorities |
| ➤ T & C Manager | - Labor / Employees |
| ➤ Director of Marketing | - Media / Embassies / Guests |
| ➤ Chief Engineer | - YESB / YCDC / MPT / Contractors |

Documentation and Review

There should be a system for the documentation and regular review of the programme. This is to facilitate retrieval of relevant documents and to ensure that the programmes remain relevant and effective. All revision to the Health and Safety manual should be dated and endorsed by General Manager.

Appendix 22: Organization structure of Mercure Yangon Kaba Aye Hotel and Service Apartment

MERCURE YANGON KABA AYE ORGANIZATION CHART

Executive Committee (Excom)

