

Environmental Impact Assessment

Document Stage: Updated
Number: 51077-003
August 2023

Maldives: Greater Malé Waste-to-Energy Project – Waste to Energy Plant (Part C)

Appendices

Prepared by the Ministry of Environment, Climate Change and Technology for the Ministry of Finance and the Asian Development Bank. This is an updated version of the draft originally posted in July 2020 available on <https://www.adb.org/projects/documents/mld-51077-003-eia-2>.

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TEST REPORT



Report No:

(7419)080-0561G(S)

May 16, 2019

Page 4 of 4

CPS CONDITIONS OF SERVICE

The party that submits a completed service request form to Company or signs a quotation issued by the Company for its performance of services ("Services") is the "Client" under these Conditions of Service. The entity within the Bureau Veritas Consumer Products Services division accepting the service request form and issuing the Report documenting the results of those Services is the "Company" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions (collectively, "Conditions").

1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly accepted request, applicable protocols, written information, and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights, (ii) Client will not use and rely upon Company's Report for any product whose properties differ from the sample(s) upon which the Report is based, and (iii) any goods subject to inspection will be completely prepared for the type of inspection booked for the specified date, and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including certificates of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client. Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection, (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates producing or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it retains, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies. Company disclaims all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which, Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorneys and collection agencies' fees.

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6. Relationship. (a) Nothing herein creates a partnership, agency or joint venture between the Parties. (b) The failure to require strict observance or performance of any provision of these Conditions shall not be construed to be a waiver of a Party's right to later require strict observance and performance of the same. If any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not invalidate the remainder of the Conditions. (c) For a period of two years after the commencement of this Agreement, Client shall not directly or indirectly try to solicit for employment any of Company's employees.

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8. LIMITATIONS OF LIABILITY. (A) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PERFORMED, OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (B) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATEVER NATURE OR HOWSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

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12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereof, and no modification is binding unless in writing. Any of Client's terms and conditions attached to, enclosed with or referred to in any order form, purchase order or other document shall not apply.

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END OF THE REPORT.



TEST REPORT



Report No:

(7419)080-0561H(S)

May 16, 2019

Page 1 of 4

Attn: Mr. Nashfa Nashidh

Customer:

Water Solutions (Pvt) Ltd

Address :

MA. Faseri, 1st Floor, Ameenee Magu, Male, Maldives

Date of Sample Received:

Apr 03, 2019

Date of Testing Started:

Apr 03, 2019

Date of Report Modified:

May 16, 2019

Date of Testing Completed:

May 16, 2019

Sample Description:

Sample Received as:

Approximately 500ml x 3 Nos. of Water sample contained in two sealed plastic bottles & one glass bottle respectively

Sample Identified by the Client as:

Ground Water

Thilafushi GW 8

Sample Drawn By BVCPS

NO

Photo of the Samples Submitted



**Bureau Veritas Consumer
Products Services Lanka (Pvt)
Ltd.**

No. 570, Galle Road, Katubedda, Moratuwa, Sri Lanka
Tel: (9411) 2350111-115 (dedicated lines), Fax: (9411)
112622198 & 199
Email: bvcps.lanka@lk.bureauveritas.com

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TEST REPORT



Report No:

(7419)080-0561H(S)

May 16, 2019

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TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Turbidity*	348	-	NTU	APHA 23rd ed: 2017: 2130 B
2	pH at 25°C*	7.8	-	-	APHA 23rd ed: 2017 :4500H ⁺
3	Iron (as Fe)*	0.4	-	mg/l	APHA 23rd ed: 2017: 3125 B
4	Manganese (as Mn)	0.07	-	mg/l	APHA 23rd ed: 2017: 3125 B
5	Arsenic (as As)	ND	0.001	mg/l	APHA 23rd ed: 2017: 3125 B
6	Total Dissolved Solids*	2188	-	mg/l	APHA 23rd ed: 2017: 2540 C
7	Electrical Conductivity at 25°C*	3.8	-	mS/cm	APHA 23rd ed: 2017; 2510 B
8	Cadmium (as Cd)*	ND	0.0001	mg/l	APHA 23rd ed: 2017: 3125 B
9	Lead (as Pb)*	ND	0.001	mg/l	
10	Mercury (as Hg)	ND	0.00005	mg/l	
11	Polynuclear Aromatic Hydrocarbons*				
a	Naphthalene	ND	1.0	µg/l	CPSD –AN-00576
b	Acenaphthylene	ND	1.0	µg/l	CPSD –AN-00576
c	Acenaphthene	ND	1.0	µg/l	CPSD –AN-00576
d	Fluorene	ND	1.0	µg/l	CPSD –AN-00576
e	Phenanthrene	ND	1.0	µg/l	CPSD –AN-00576
f	Anthracene	ND	1.0	µg/l	CPSD –AN-00576
g	Fluoranthene	ND	1.0	µg/l	CPSD –AN-00576
h	Pyrene	ND	1.0	µg/l	CPSD –AN-00576
i	Benzo[a]anthracene	ND	1.0	µg/l	CPSD –AN-00576
j	Chrysene	ND	1.0	µg/l	CPSD –AN-00576
k	Benzo[a]pyrene	ND	1.0	µg/l	CPSD –AN-00576
l	Benzo[e]pyrene	ND	1.0	µg/l	CPSD –AN-00576
m	Indeno[1,2,3-cd]pyrene	ND	1.0	µg/l	CPSD –AN-00576
n	Dibenzo[a,h]anthracene	ND	1.0	µg/l	CPSD –AN-00576
o	Benzo[g,h,i]perylene	ND	1.0	µg/l	CPSD –AN-00576
p	Benzo[b]fluoranthene	ND	1.0	µg/l	CPSD –AN-00576
q	Benzo[j]fluoranthene	ND	1.0	µg/l	CPSD –AN-00576
r	Benzo[k]fluoranthene	ND	1.0	µg/l	CPSD –AN-00576

TEST REPORT



Report No: (7419)080-0561H(S)

May 16, 2019

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(*)Indicates- ISO 17025 :2005 accredited test.

Remark:

The test report (7419)080-0561H has been replaced with the test report (7419)080-0561H(S) in order to add test results of Heavy metals.

NOTE:

APHA: American Public Health Association,
SLS: Sri Lanka Standard, ND: Not Detected,
LOQ: Limit of Quantification, mg/l: milligrams per liter,
°C :Celcius, NTU: Nephelometric Turbidity Units,
mS/cm : milliSiemens per centimeter.

Contact Information for this report (Technical and General Inquiries and Feedback)

GENERAL INQUIRIES:		
IROSHA UDUGAMPALA	TEL: +94 768 229 528	E-MAIL: Irosha.Udugampala@lk.bureauveritas.com
TECHNICAL INQUIRIES:		
ROHITHA GUNARATHNA	TEL: +94 774 151 768	E-MAIL: rohitha.gunarathna@lk.bureauveritas.com
FEED BACK:		
KUMUDINI RATHNAYAKE	TEL: +94 768 229 455	E-MAIL: kumudinie.rathnayake@lk.bureauveritas.com

REVIEWED BY: SHYAMIKA WICKRAMASINGHE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATORY

ROHITHA GUNARATHNA

MANAGER-
ANALYTICAL LABORATORY

TEST REPORT



Report No:

(7419)080-0561H(S)

May 16, 2019

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END OF THE REPORT.

WATER QUALITY TEST REPORT
 Report No: 5001R1070

Customer Information:
 Water Solutions Pvt Ltd

Report date: 03/04/2019
 Test Requisition Form No: 9001R7119
 Sample's Received Date: 03/04/2019
 Date of Analysis: 03/04/2019 - 04/04/2019

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 Male' 20062

Sample Description	Thirathu GW1	Thirathu GW2	Thirathu GW3	TEST METHOD	UNIT
Sample Type	Ground Water	Ground Water	Ground Water		
Sample No	83203841	83203842	83203945		
Sample Date	02/04/2019	02/04/2019	02/04/2019		
PARAMETER	ANALYSIS RESULT				
Physical Appearance	Clear	Pale brown with particles	Pale yellow with particles		
Chloride	165	1715	7200	In-house Test method (Adapted from MS05 Chloride analysis Operator's Manual)	mg/L
Nitrate *	1.7	6.1	5.0	Method 411* (Adapted from HACH DR2000 Spectrophotometer procedure Manual)	mg/L
Phosphate *	0.07	0.23	0.2*	Method 4141 (Adapted from HACH DR2000 Spectrophotometer procedure Manual)	mg/L
Total Coliforms	>2420	291	>2420	ColiChart - 5-Quard Tray#2000	MPN/100ml

Keys: mg/L - Milligram Per Liter, MPN/100ml - Most Probable Number

Checked by



Aminath Safa
 Laboratory Executive

Approved by



Mohamed Eymen
 Assistant Manager, Quality

Notes: Sampling Authority: Sampling was not done by MWSC Laboratory
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 This test report is ONLY FOR THE SAMPLES TESTED.
 - Information provided by the customer
 *Parameters accredited by DAG under ISO/IEC 17025:2005

WATER QUALITY TEST REPORT
 Report No: 500181970

Customer Information:
 Water Solutions Pvt Ltd

Report date: 03/04/2019
 Test Requisition Form No: 900187119
 Sample(s) Received Date: 03/04/2019
 Date of Analysis: 03/04/2019 - 04/04/2019

Lab. Piyawathi magu
 Male' 20063

Sample Description	Thilafushi GWA	Thilafushi GWS	Thilafushi GWS	TEST METHOD	UNIT
Sample Type	Ground Water	Ground Water	Ground Water		
Sample No	RS203944	SS20354E	SS20354G		
Sampled Date	02/04/2019	02/04/2019	02/04/2019		
PARAMETER	ANALYSIS RESULT				
Physical Appearance	Pale yellow with particles	Olive green with particles	Olive green with particles		
Chloride	470	3125	6325	In-house Test method (Adapted from HANSEN Chloride analyzer Operation Manual)	mg/L
Nitrate ¹	7.5	25.5	34.5	Method 071 (Adapted from IAP11035023 Spectrophotometer Operating Manual)	mg/l
Phosphate ¹	<0.05 (LOQ 0.05 mg/L)	0.46	0.57	Method 048 (Adapted from IAP11035023 Spectrophotometer Operating Manual)	mg/L
Total Coliforms	1386	>2420	10	Coliform-182 (User - In-house)	MPN/100ml

Key: mg/L - Milligram Per Liter, MPN/100ml - Most Probable Number

Checked by



Amineth Sata
 Laboratory Executive

Approved by



Mohamed Eyman
 Assistant Manager, Quality

Notes: Sampling Authority: Sampling was not done by MWSC Laboratory
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¹ Information provided by the customer
² Parameters accredited by DWQ under ISO / IEC 17025:2005

WATER QUALITY TEST REPORT
 Report No: 900181970

Customer Information:
 Water Solutions Pvt Ltd

Isa. Athiyarathu Magu
 Male' 20068

Report date: 08/04/2019
 Test Requisition Form No: 900181119
 Sample(s)/Review/Date: 03/04/2019
 Date of Analysis: 03/04/2019 - 04/04/2019

Sample Description	Thilafushi GWS	Thilafushi GWS	TEST METHOD	UNIT
Sample Type	Ground Water	Ground Water		
Sample No	83203947	83203948		
Sampled Date	02/04/2019	02/04/2019		
PARAMETER	ANALYSIS RESULT			
Physical Appearance	Yellowish particles	Cloudy and opaque		
Chloride	8125	1005	In house Test method (Adapted from MS20 Chloride Analyser Operation Manual)	mg/L
Nitrate *	12.2	3.4	Method 2171 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
Phosphate *	2.27	0.72	Method 2043 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
Total Coliforms	>2420	4	Coliforms - Membrane Filtration	MPN/100ml

Keys: mg/L : Milligram Per Liter, MPN/100ml : Most Probable Number

Checked by



Amirth Saha
 Laboratory Executive

Approved By



Mohamed Eymen
 Assistant Manager, Quality

Notes: Sampling Authority: Sampling was not done by MWSC Laboratory
 This report shall not be reproduced except in full without written approval of MWSC
 This test reports ONLY FOR THE SAMPLES TESTED
 - Information provided by the customer
 *Parameters accredited by DAG under ISO 17025:2005

*****END OF REPORT*****

TEST REPORT



Report No: (7418)144-0214A(SL)

Jul 14, 2018

Page 1 of 4

Applicant: Water Solutions (Pvt) Ltd.

Address : Ma Fas Eri, 1st Floor,
Ameenee Magu,
Male,
Maldives.

Attn: Mr. Aslam Mohamed/ Mr. Abdulla Fazeel

Sample Received as: 500ml x 2 No.s of water sample contained in sealed plastic bottles submitted by the client.

Sample Described by the Client as: Thilafushi SW1
Date & time Sampled : 03/07/2018 at 07.30 a.m

Date of Sample Received: Jul 06, 2018

Date of Testing Started: Jul 06, 2018

Date of Testing Completed: Jul 13, 2018

Date of Report Issued: Jul 14, 2018

Photo of the Samples submitted



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1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly completed request, applicable protocols, written information, and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights; (ii) Client will not use and rely upon Company's Report for any product whose properties differ from the sample(s) upon which the Report is based; and (iii) any goods subject to inspection will be completely prepared for the type of inspection booked for the scheduled date; and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including statements of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection, (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates producing or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it retains, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies; Company disclaims all liability in such capacities. Client understands that, if it works to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorneys and collection agencies' fees.

5. Intellectual Property. The names, service marks, trademarks and copyrights of Company and its affiliates (collectively, the "Marks") are and remain the sole property of Company and shall not be used by Client. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of Company or its affiliates. Client understands that any information or samples submitted to Company is a license for Company to use the same in the performance of Services.

6. Relationship. (a) Nothing herein creates a partnership, agency or joint venture between the Parties. (b) The failure to require strict observance or performance of any provision of these Conditions shall not be construed to be a waiver of a Party's right to later require strict observance and performance of the same. If any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not invalidate the remainder of the Conditions. (c) For a period of two years after the commencement of this Agreement, Client shall not directly or indirectly try to solicit for employment any of Company's employees.

7. INDEMNITY. CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, ITS AFFILIATES, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD-PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH, OR EXPENSE OF WHATEVER NATURE INCLUDING BUT NOT LIMITED TO CLAIMS ARISING FROM OR RELATING TO (I) THE PERFORMANCE OF ANY SERVICES BY COMPANY (II) THE SALE, RESELL, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR (II) BREACH OF CLIENT'S OBLIGATIONS OR WARRANTIES HEREIN.

8. LIMITATIONS OF LIABILITY. (A) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PERFORMED, OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ANY SERVICES BY COMPANY HEREUNDER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (B) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATEVER NATURE OR HOWSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. Force Majeure. If any event of force majeure or any event outside the control of Company occurs, Company may immediately cancel or suspend its performance hereunder without assuming any liability whatsoever to Client.

10. Governing Law. These Conditions shall be governed by the laws of the country as follows: for Services performed in (i) the Americas: the laws of New York, (ii) Asia Pacific, South Asia, Middle East and Africa: the laws of Hong Kong (except for China where PRC laws govern), and (iii) Europe: the laws of England.

11. Dispute Resolution. (a) If Client desires to assert a claim relating to the Services, it must submit the same to Company in writing setting forth with particularity the basis for such claim within 90 days from discovery of the claim and not more than six months after the date of issuance of the Report. Client waives any and all claims without limitation that it does not submit within such time periods. (b) If a dispute arises under this Agreement, the Parties shall first attempt good faith negotiations, failing which, the Parties (i) agree that the courts of the country of governing law shall have exclusive jurisdiction to settle any such dispute related to this Agreement and (ii) irrevocably waive their right to trial by jury in any such action or proceeding.

12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereof, and no modification is binding unless in writing. Any of Client's terms and conditions attached to, enclosed with or referred to in any order form, purchase order or other document shall not apply.



**BUREAU
VERITAS**

TEST REPORT

Report No:

(7418)144-0214A(SL)

Jul 14, 2018

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TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	24.2	-	°C	APHA 20th Edition – 2550B
2	Turbidity	0.3	-	NTU	APHA 2130 B
3	pH at 24°C*	8.4	-	-	FD-MTHD-007:2013 Reference to APHA 4500H+
4	Nitrate (as NO ₃)	0.3	-	mg/l	APHA 4500 -NO ₃ C
5	Oil & Grease*	<2.0	2.0	mg/l	FD-MTHD-032:2013 Reference in APHA 5520B
6	Free Ammonia (as NH ₃)	0.05	-	mg/l	SLS 614 Appendix A: 2013
7	Salinity	36	-	ppt	APHA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPSD-AN-00581-MTHD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	mg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	ND	0.001	mg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	



BUREAU
VERITAS

TEST REPORT

Report No: (7418)144-0214A(SL)

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Remark –

***ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SLAB)**

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand,
APHA: American Public Health Association
ND: Not Detected, LOQ: Limit of Quantification,
NTU: Nephelometric Turbidity Units, °C : Celsius,
ICP-MS: Inductively Coupled Plasma – Mass Spectroscopy.

Contact information for this report (Technical and General Inquiries and Feedback)


GENERAL INQUIRIES:		
IROSHA UDUGAMPALA	TEL: +94 768 229 528	E-MAIL: Irosha.Udugampala@lk.bureauveritas.com
TECHNICAL INQUIRIES:		
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FEED BACK:		
DIHANUKA PERERA –EXECUTIVE QHSE	TEL: +94 768 229 479	E-MAIL: dhanuka.percera@lk.bureauveritas.com

REVIEWED BY: SHYAMIKA WICKRAMASINGHE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATORY

APPROVED BY:


INDRAJITH HATHURUSINGHA
MANAGER -
FOOD LABORATORY



TEST REPORT

Report No:

(7418)144-0214A(SL)

Jul 14, 2018

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GENERAL CONDITIONS OF SERVICE

This report is a certified service record form to Company to use in a situation raised by the Company to its customers (the "Client"), as the "Client" under these Conditions of Service. The only when the Bureau Veritas Consumer Products Services division (referred to as "Company") is providing the Report documented the results of those Services is the "Company" under these Conditions of Service. Company and Client are together the "Parties" and each a "Party". A request for Services constitutes a legally binding agreement or Joint Order when such is received by the Company. "Agreement" under the following terms and conditions collectively "Conditions".

1. Services: (a) The competence of the Services will be evaluated by the Company's testing facilities a written report setting forth the results of the Services based upon the properly executed request, applicable protocols, written information, and where applicable, the product, service or article to be tested by Client (the "Product"). Company may delegate the performance of all or a portion of the Services to its affiliates of Company or to an agent or subcontractor. Client shall provide to Company or a timely case, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, accept or reject Samples Submitted to Company for the Services that were not developed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product, service or article submitted in violation of a third party's intellectual property rights, (ii) Client will not use and will upon Company's Report for any product, service or article differ from the sample's made with the Report is issued; (iii) Client City 02888 100000 to instruct will be completely prepared for the type of inspection booked for the specified date, and (c) Client accepts sole responsibility and liability for the accuracy of information submitted to government or other regulatory bodies, including conditions of compliance required under the US Consumer Product Safety Improvement Act and EU regulatory body REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided ESTIMATES TO CLIENT INFORMATION IN SUCH DOCUMENTATION.

2. Report: (a) The Report will constitute the sole reference for the Services. It will refer solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services, with no input of written information and inductive reasoning from Client. Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection. If the Report will set forth the findings of Client, which will respect to the product samples identified (name and ID) the results as forth in the Report are not to be construed as indicative of identification of the quality or characteristics of the item from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company, intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be provided, used for advertising purposes, copied or not called for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not reuse a Report for purposes of litigation nor shall a third Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client initiates proceedings or otherwise using the Report in any legal proceedings, a third party may Company may be subpoenaed to testify to the Report's contents.

3. Representations and Warranties: (a) Company undertakes due care and ordinary skill at the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not bear the scope of Client or the third party's liability, including designers, manufacturers, agents, buyers, distributors, and intermediaries or shipping companies. Company shall not be liable in such capacity. Client understands that it will be required to bear the risk of loss, damage or injury it would obtain appropriate insurance. (c) Company does not warrant or guarantee that the Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payments: Payment is due within 30 days after the date of invoice, using when Company may receive any credit extended to Client. Client shall reimburse Company for (i) travel or on-site services from the 8th mile per mile (10¢) at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting paid due amounts, including court attorney and collection agencies fees.

5. Intellectual Property: The names, service marks, trademarks and slogans of Company, provided affirmatively as trademarks, the "Marks" are and remain the sole property of Company and shall not be used by Client. Client shall not control the quality of the Marks or the way they are used. Client shall not make or publish any statement which may harm the image or reputation of Company or its affiliates. Client understands that any information or services which are provided by Company to Client for Company to use the same in the performance of Services.

6. Relationship: (a) Neither Party creates a partnership, joint venture, or other relationship between the Parties. (b) The terms of report and compliance to performance of any promise of these Conditions shall not be construed to be a contract or a third party's liability for the third party's actions or inactions of the same. If any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not affect the remainder of the Conditions. (c) For a period of two years after the commencement of this Agreement, Client shall not directly or indirectly attempt to solicit or employ any of Company's employees.

7. INDEMNITY: CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD-PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH OR EXPENSE OF WHATSOEVER NATURE, INCLUDING REASONABLE ATTORNEY'S FEES AND COSTS OF LITIGATION, (i) THE PERFORMANCE OF ANY SERVICES BY COMPANY; (ii) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR (iii) BREACH OF CLIENT'S OBLIGATIONS ON ANY MATTER HEREIN.

8. LIMITATIONS OF LIABILITY: (a) COMPANY SHALL NOT BE LIABLE FOR ANY DIRECT, CONSEQUENTIAL OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PERFORMED, OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (b) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATSOEVER NATURE OR WHATSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. Force Majeure: In any event of force majeure or any event outside the control of Company occurs, Company may immediately suspend or suspend its performance hereunder without incurring any liability whatsoever to Client.

10. Governing Law: These Conditions shall be governed by the law of the territory in which the Services performed in if the Parties are the laws of New York in the State of New York, South Africa, Middle East and Africa, the laws of Hong Kong (except for China where PRC laws govern), and (ii) Except the laws of England.

11. Dispute Resolution: (a) If Client desires to amend a claim relating to the Services, it must submit the same to Company in writing setting forth with particularity the basis for such claim within 60 days from discovery of the claim and not later than the date of issuance of the Report. Client waives the right to litigate the claim without the claim that it does not submit within such time periods. If the Parties disagree under this Agreement, the Parties shall first attempt good faith negotiations. If such negotiations fail, the Parties shall agree in the courts of the country of governing law, shall have exclusive jurisdiction to initiate and conduct the litigation in a court of competent jurisdiction in the country of governing law. Client shall not bring any action or proceeding.

12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter stated and no modification, amendment or change in any of Client's terms and conditions attached to, included with or referred to in any order form, purchase order or other document shall be valid.

Client Copyright 2018 Bureau Veritas

END OF THE REPORT.

Report No: (7418)144-0214B(SL)

Jul 14, 2018

Page 1 of 4

Applicant: Water Solutions (Pvt) Ltd.

Address : Ma Fas Fri, 1st Floor,
Ameenee Magu,
Male,
Maldives.

Attn: Mr. Aslam Mohamed/ Mr. Abdulla Fazeel

Sample Received as: 500ml x 2 No.s of water sample contained in sealed plastic bottles submitted by the client.

Sample Described by the Client as: Thilafushi SW2
Date & time Sampled : 03/07/2018 at 07.45 a.m

Date of Sample Received: Jul 06, 2018

Date of Testing Started: Jul 06, 2018

Date of Testing Completed: Jul 13, 2018

Date of Report Issued: Jul 14, 2018

Photo of the Submitted Sample



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CPS CONDITIONS OF SERVICE

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2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection: (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or reprinted for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates producing or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it retains, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies; Company declines all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest or overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including collection agencies' fees.

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8. LIMITATIONS OF LIABILITY. (A) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PERFORMED, OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (B) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATEVER NATURE OR HOWSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

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10. Governing Law. These Conditions shall be governed by the laws of the country as follows: for Services performed in (i) the Americas: the laws of New York, (ii) Asia Pacific, South Asia, Middle East and Africa: the laws of Hong Kong (except for China where PRC laws govern), and (iii) Europe: the laws of England.

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12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereof and no modification is binding unless in writing. Any of Client's terms and conditions attached to, enclosed with or referred to in any order form, purchase order or other document shall not apply.

TEST REPORT

Report No:

(7418)144-0214H(S1)

Jul 14, 2018

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TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	24.2	-	°C	APHA 20th Edition – 2550B
2	Turbidity	0.2	-	NTU	APHA 2130 B
3	pH at 24°C*	8.4	-	-	FD-MTHD-007:2013 Reference to APHA 4500H
4	Nitrate (as NO ₃)	0.4	-	mg/l	APHA 4500 -NO ₃ - E
5	Oil & Grease*	<2.0	2.0	mg/l	FD-MTHD-032:2013 Reference to APHA 5520B
6	Free Ammonia (as NH ₃)	<0.02	0.02	mg/l	SLS 014 Appendix A: 2013
7	Salinity	37	-	ppt	APHA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPSD-AN-00581-MTHD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	mg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	0.003	-	mg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	



BUREAU
VERITAS

TEST REPORT

Report No:

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Remark –

*ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SLAB)

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand,
APHA: American Public Health Association
ND: Not Detected, LOQ: Limit of Quantification,
NTU: Nephelometric Turbidity Units, °C : Celsius,
ICP-MS: Inductively Coupled Plasma – Mass Spectroscopy.

Contact information for this report (Technical and General Inquiries and Feedback)


GENERAL INQUIRIES:		
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REVIEWED BY: SHYAMIKA WICKRAMASINGHEE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATORY

APPROVED BY:



 INDRAJITH HATHURUSINGHA
 MANAGER -
 FOOD LABORATORY



TEST REPORT

Report No:

(7418)144-0214B(SL)

Jul 14, 2018

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GEN CONDITIONS OF SERVICE

The party that submits a contracted service request form to Company or signs a purchase order issued by the Company for its performance of services ("Request" or the "Client" under these Conditions of Service. The party using the Guides, Veritas Consumer Products Services division, accepts the services rendered and authorizes the Report documenting the results of these Services to be "Company" under these Conditions of Service. Company and Client are together, the "Parties" and each is a "Party". A request for Services constitutes a Request/Order of purchase on both Parties when such a request is accepted by the Company. ("Assessment" under the following terms and conditions collectively, "Conditions")

1. **Services.** (a) The completion of the Services shall be verified by the Company's testing in Client's service report setting forth the results of the Services based upon the properly submitted requests, applicable protocols, written information and where applicable, the product sample (to be delivered to Client) in Company ("Report"). Company may be deemed to be the performance of these Services to an affiliate of Company or to an agent or subcontractor. Client may provide to Company such a third party, subcontractor, and other agent, necessary to assist Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company by the Client that were not employed in the course of performance of the Services. (b) Client represents and warrants to Company that in each product sample it has submitted in violation of a third party's intellectual property rights, or Client will not use the information Company's Report may contain, either prior to or after the services upon which the Report is based, and for any goods subject to intellectual property rights, in the manner permitted by the type of information used for the specific test, and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including all levels of certification requests under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. **Report(s).** The Report shall not constitute the sole determination by the Client, nor shall it apply to the test and analysis of other test materials received by Company at the time of performance of the Services within the limits of written information and engineering received from Client. Company shall take care to update the Report after its issuance. Where the Services include testing or inspection of the Report, and will take the language of Company's test will be subject to the product samples, identified therein and all the results will form the basis of the report to be provided as requested. (a) The Report will be the quality characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely to Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for marketing purposes, used, or otherwise disclosed or publicly disclosed in how Company's performance is perceived. Company is not responsible for any third party's distribution of the Report. (c) Client shall not request a Report for purposes of litigation, or that, if the Company is a franchisee or employee of an employer, or a subsidiary thereof, Company's policies or any contract of Client prohibits providing or otherwise using the Report in any way, or otherwise, it shall not rely on Company and to challenge the Report's completeness.

3. **Representations and Warranties.** (a) Company warrants the data and accuracy used in the performance of its Services. (b) Client, by use of the Client's form to request and a purchase order, agrees to waive the price of Client's and third party test services, including diagnostic, manufacturing, special, custom, and other, and to agree to indemnify and hold Company harmless from all liability, including Client's liability, that arises from the use of the product samples from which the Company's performance of Services is based. (c) Company does not warrant or guarantee Client's products and Company's Report shall not represent the ability of manufacturing, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. **Payment.** Payment for the test results shall be made by the date of invoice, along with Company's invoice, any check returned to Client. Client shall reimburse Company for its related expenses, including but not limited to the cost of materials used, at a rate of \$400 per month and (a) any other costs Company incurs in completing such amounts, including claim, attorney and collection agency fees.

5. **Intellectual Property.** The names, service marks, trademarks and logos of Company and its affiliates, products, services, the Name(s) are and remain the sole property of Company and shall not be used by Client. Client shall not claim the validity of the Veritas name, any other trademark, logo, or other intellectual property associated with the Name(s) or the image or reputation of Company or its affiliates. Client understands that any information or product submitted to Company is a license to Company to use the same in the performance of Services.

6. **Indemnification.** Client holds Client's own and a third party's property, including but not limited to Client's form, the failure to update their information or performance of any provision of these Conditions shall not be construed to be a waiver of a Party's right to file a claim with the appropriate government and performance of the same. If any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not affect the remainder of the Conditions. (a) For a period of two years after the date of the final report, Client shall indemnify and hold Company harmless, directly or indirectly, from and against all claims, damages, losses, obligations or warranties of Company's employees.

7. **INDEMNITY OF CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, THE AFFILIATES, AND THEIR EMPLOYEES, CONTRACTORS, SERVICE PROVIDERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD-PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH, OR EXPENSE, INCLUDING REASONABLE ATTORNEY'S FEES, FROM ANY AND ALL SUCH CLAIMS, DAMAGES, LOSSES, OBLIGATIONS, OR WARRANTIES, IN THE PERFORMANCE OF ANY SERVICES PROVIDED BY COMPANY, OR THE SALE, REPAIR, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR THE BREACH OF CLIENT'S OBLIGATIONS OR WARRANTIES THEREIN.**

8. **LIMITATIONS OF LIABILITY.** (a) COMPANY SHALL NOT BE LIABLE FOR ANY DIRECT, CONSEQUENTIAL OR SPECIAL LOSS OR LOSS OF PROFITS WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PROVIDED, OR THE SERVICES PROVIDED BY COMPANY. HEREUNDER, COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OR CLIENT'S HERETOFTER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION OF THE SERVICES REQUESTED BY CLIENT, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (b) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INJURY, DEATH OR DAMAGE OF WHATEVER NATURE, FOR WHATSOEVER SERVICE PROVIDED SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SERVICES PROVIDED RELATING TO SUCH CLAIM.

9. **Force Majeure.** If any event of force majeure or any event outside the control of Company occurs, Company may, in its sole discretion, suspend or delay its performance hereunder without incurring any liability whatsoever to Client.

10. **Governing Law, Time and Venue.** This shall be governed by the laws of the state of New York, New York, and the laws of the United States of America. The venue of any litigation shall be in the state of New York, New York, and the County of New York.

11. **Dispute Resolution.** (a) If Client wishes to avoid a court hearing in the Republic of the United States, it must submit the same to Company in writing within ten (10) business days for such claim within 60 days from discovery of the claim and not more than six months after the date of issuance of the Report. Client waives any and all claims, without limitation, that it does not submit within such time period. (b) If a dispute arises, and the appropriate law has not been determined, good faith negotiations, being which the Parties agree as to the court of the country of governing law, shall have occurred prior to the filing of any lawsuit or arbitration Agreement and the necessary steps shall be taken to resolve any such claim or proceeding.

12. **These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereof and no modification is binding unless in writing. Any of Client's terms and conditions attached to, received with or related to its order form, purchase order or other document shall not apply.**

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END OF THE REPORT.

CPS CONDITIONS OF SERVICE

The party that submits a completed service request form to Company or signs a quotation issued by the Company for its performance of services ("Services") is the "Client" under these Conditions of Service. The entity within the Bureau Veritas Consumer Products Services division accepting the service request form and issuing the Report documenting the results of those Services is the "Company" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions (collectively, "Conditions"):

1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly accepted request, applicable protocols, written information, and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights; (ii) Client will not use and rely upon Company's Report for any product whose properties differ from the sample(s) upon which the Report is based; and (iii) any goods subject to inspection will be completely prepared for the type of inspection covered for the specified date, and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including certificates of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection; (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it use Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates producing or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not have the place of Client or the third parties that it retains, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies; Company declines all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorneys and collection agencies' fees.

5. Intellectual Property. The names, service marks, trademarks and copyrights of Company and its affiliates (collectively, the "Marks") are and remain the sole property of Company and shall not be used by Client. Client shall not contest the validity of the Marks or take any action that might impact the value or goodwill associated with the Marks or the image or reputation of Company or its affiliates. Client understands that any information or samples submitted to Company is a license for Company to use the same in the performance of Services.

6. Relationship. (a) Nothing herein creates a partnership, agency or joint venture between the Parties. (b) The failure to require strict observance or performance of any provision of these Conditions shall not be construed to be a waiver of a Party's right to later require strict observance and performance of the same. If any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not invalidate the remainder of the Conditions. (c) For a period of two years after the commencement of this Agreement, Client shall not directly or indirectly try to solicit for employment any of Company's employees.

7. INDEMNITY. CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, ITS AFFILIATES, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD-PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH, OR EXPENSE OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO CLAIMS ARISING FROM OR RELATING TO (I) THE PERFORMANCE OF ANY SERVICES BY COMPANY, (II) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR (III) BREACH OF CLIENT'S OBLIGATIONS OR WARRANTIES HEREIN.

8. LIMITATIONS OF LIABILITY. (A) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PROVISION FOR WHICH SERVICES WERE PERFORMED, OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER, OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (B) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATEVER NATURE OR HOWSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. Force Majeure. If any event of force majeure or any event outside the control of Company occurs, Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

10. Governing Law. These Conditions shall be governed by the laws of the country as follows, for Services performed in (i) the Americas: the laws of New York, (ii) Asia Pacific, South Asia, Middle East and Africa: the laws of Hong Kong (except for China where PRC laws govern), and (iii) Europe: the laws of England.

11. Dispute Resolution. (a) If Client desires to assert a claim relating to the Services, it must submit the same to Company in writing setting forth with particularity the basis for such claim within 90 days from discovery of the claim and not more than six months after the date of issuance of the Report. Client agrees any and all claims without limitation that it does not submit within such time periods. (b) If a dispute arises under this Agreement, the Parties shall first attempt good faith negotiations. Failing which, the Parties (i) agree that the courts of the country of governing law shall have exclusive jurisdiction to settle any such dispute related to this Agreement and (ii) irrevocably waive their right to trial by jury in any such action or proceeding.

12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereof, and no modification is binding unless in writing. Any of Client's terms and conditions attached to, enclosed with or referred to in any order form, purchase order or other document shall not apply.

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TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	24.2	-	°C	APHA 20th Edition – 2550B
2	Turbidity	0.1	-	NTU	APHA 2130 B
3	pH at 24°C*	8.4	-	-	FD-MTHD-007:2013 Reference to APHA 4500H+
4	Nitrate (as NO ₃ -)	0.4	-	mg/l	APHA 4500 -NO ₃ -B
5	Oil & Grease*	<2.0	2.0	mg/l	FD-MTHD-032:2013 Reference to APHA 5520B
6	Free Ammonia (as NH ₃)	<0.02	0.02	mg/l	SLS 614 Appendix A: 2013
7	Salinity	37	-	ppt	APHA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPSD-AN-00581-MTHD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	mg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	0.004	-	mg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	



BUREAU
VERITAS

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Remark –

***ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SLAB)**

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand,
APHA: American Public Health Association
ND: Not Detected, LOQ: Limit of Quantification,
NTU: Nephelometric Turbidity Units, °C : Celsius,
ICP-MS: Inductively Coupled Plasma – Mass Spectroscopy.


Contact information for this report (Technical and General Inquiries and Feedback)

GENERAL INQUIRIES:		
IROSHA UDUGAMPALA	TEL: +94 768 229 528	E-MAIL: Irosha.Udugampala@lk.bureauveritas.com
TECHNICAL INQUIRIES:		
INDRAJITH HATHURUSINGHA	TEL: + 94 769 603 814	E-MAIL: Indrajith.hs@lk.bureauveritas.com
FEED BACK:		
DHANUKA PERERA –EXECUTIVE QHSE	TEL: +94 768 229 479	E-MAIL: dhanuka.perera@lk.bureauveritas.com

REVIEWED BY: SUYAMKA NICKERMASSINGHE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATORY

APPROVED BY: 
INDRAJITH HATHURUSINGHA
MANAGER -
FOOD LABORATORY



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END CONDITIONS OF SERVICE

The electrical services completed were required from Company's client in order to identify the Company for all performance of services ("Services") to the Client under these Conditions of Service. The entity with the Bureau Veritas Consumer Products Services (through its "Service Agents") has and issuing this Report is based on the results of those devices in the "Compliance" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions collectively, "Conditions":

1. **Services:** (a) The completion of the Services shall be conducted by the Company's testing to Client's written report and report both the results of the Services listed upon the properly executed request, applicable products, system information, and where applicable, the product sample provided by Client. ("Company Report"). Company may delegate through the performance of an authorized agent of the Services, or an agent of Client or its agent or subcontractor. Client shall provide to Company on a timely basis, all documents, including but not limited to, to enable Company to properly perform the Services. ("Client's Documents") and shall deliver a sufficient quantity of product samples to Client for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that each product sample is not a derivative or a copy of a third party's intellectual property rights and Client will not use any third party's Report for any product whose IP is derived from the Services or which the Report is based on and that any goods, services, or information will be completely protected by the type of legal description for the specified date and (c) Client agrees to be responsible and liable for the accuracy of the samples submitted to government or other regulatory bodies, including certification of compliance requirements under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client is responsible and liable for a quality and safety and apply both where Company has provided assistance to Client in preparation of such compliance.

2. **Report:** (a) The Report shall constitute the sole document for the Services, in these terms, conditions and circumstances as described and received by Company at the time of performance of the Services with the terms of service information and instructions received from Client. Company shall have the obligation to update the Report that it contains. Where the Services include testing or inspection, the Report will set forth the findings of the company, which will respect to the product samples identified herein and to the results set forth in the Report and not to be construed as evidence of representation of the quality or completeness of the information provided, variables and tests for Company compliance of Services. (b) The Report is owned solely by Company and shall be the property of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising, commercial or promotional, or distribution of products associated with Client or its affiliates or other purposes. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for services of inspection, nor shall it use Company, its Affiliates or employees as an agent in any proceeding with Client's competitors or other entities. (d) Client acknowledges that it is not a consumer of the Report in any legal proceedings, and shall not, whether in writing or otherwise, be bound by the Report. (e) Client shall not use the Report for any other purpose.

3. **Representations and Warranties:** (a) Company does not warrant the rate and quality of the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not have the scope of work or the liability of an insurer, including discovery, manufacture, design, supply, installation, and transportation of shipping containers. Company disclaims all liability in such capacities. Client understands that its failure to perform may have consequences of injury, a threat to other appropriate insurance. (c) Company does not warrant or guarantee Client's location. The Company's Report shall not constitute a certificate of compliance, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. **Payment:** Payment shall be due 30 days after the date of invoice, being when Company may receive any check tendered to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1% per month and (ii) any other costs Company incurs in obtaining paid due amounts, including legal, attorney and collection agency costs.

5. **Intellectual Property:** The names, service marks, trademarks and copyrights of Company and its Affiliates, collectively, the "Marks" are and remain the sole property of Company and shall not be used by Client. Client shall not register the use of the Marks in any jurisdiction. Client shall not use the Marks or goodwill associated with the Marks or the image or reputation of Company or its affiliates. Client understands that any registration or sample sales shall be Company's sole concern for Company to use the Marks in the performance of Services.

6. **Relationship:** (a) Nothing herein creates a partnership, agency or joint venture between the Parties. (b) The intent is to ensure strict compliance or performance of any provision of these Conditions and not to constitute a membership of a Party's right to take any legal or equitable action in performance of the same. Many provisions of these Conditions are held in trust for the benefit of the other party, which may be held in trust for the benefit of the other Party, and a party of these provisions shall be deemed to be held in trust for the benefit of the other Party, and shall not be deemed to be held in trust for the benefit of the other Party.

7. **INDEMNITY:** CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, ITS AFFILIATES AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH, OR EXPENSE OF ANY KIND, INCLUDING REASONABLE ATTORNEY'S FEES, BUT NOT LIMITED TO CLAIMS ARISING FROM OR RELATING TO THE PERFORMANCE OF ANY SERVICES OF COMPANY, OR THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR THE BREACH OF CLIENT'S OBLIGATIONS OR WARRANTIES HEREIN.

8. **LIMITATIONS OF LIABILITY:** (a) COMPANY SHALL NOT BE LIABLE FOR ANY DIRECT, CONSEQUENTIAL, OR SPECIAL LOSS IN CONNECTION WITH THE SERVICE OR THE PRODUCT FOR WHICH SERVICES WERE PERFORMED OR THE SERVICES PROVIDED BY COMPANY. HEREUNDER COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF THE OBLIGATIONS HEREIN OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION EMPLOYED BY COMPANY. NEITHER OF THE CAUSE OF THE DELAY OR FAILURE, IN THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INJURY, OR DAMAGE OR EXPENSE OF ANY KIND, SHALL EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SERVICE SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. **Force Majeure:** Party shall not be liable for any event outside the control of Company except, Company may, at its sole discretion, suspend or terminate performance hereunder without incurring any liability whatsoever to Client.

10. **Governing Law:** These Conditions shall be governed by the laws of the country as follows: for Services performed in (i) the Americas, the laws of New York, (ii) Asia Pacific, South America, Middle East and Africa, the laws of Hong Kong (except in China where PRC laws govern), and (iii) Europe, the laws of England.

11. **Dispute Resolution:** (a) If Client desires to assert a claim relating to the Services, it must submit the same to Company in writing, setting forth with particularity the basis for such claim within 90 days from discovery of the claim and not more than six months after the date of issuance of the Report. Client waives any and all claims without limitation that it does not submit within such time period, (b) If a dispute arises under this Agreement, the Parties shall first attempt good faith negotiations. If no such attempt is made within 30 days of the date of the dispute, the Party of the country of jurisdiction shall have exclusive jurisdiction to settle any and all disputes arising under this Agreement and its provisions shall prevail over any other provisions in any other contract or agreement involving the Parties.

12. **Free Conditions:** The applicable laws form and/or regulation and the Report represent the work understanding of the Parties or its usual manner of work and no reliance on it is having. (b) In no event, any of Client's information shall be disclosed without the prior written consent of the company and no reliance on it is having.

Client's Trace only 2018 Bureau Veritas

END OF THE REPORT.

Report No:

(7418)144-0214D(SL)

Jul 14, 2018

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Applicant: Water Solutions (Pvt) Ltd.

Address : Ma Fus Eri, 1st Floor,
Ameenec Magu,
Male,
Maldives.

Attn: Mr. Aslam Mohamed/ Mr. Abdulla Fazeel

Sample Received as: 500ml x 2 No.s of water sample contained in sealed plastic bottles submitted by the client.

Sample Described by the Client as: Thilafushi SW4
Date & time Sampled : 03/07/2018 at 08.15 a.m

Date of Sample Received: Jul 06, 2018

Date of Testing Started: Jul 06, 2018

Date of Testing Completed: Jul 13, 2018

Date of Report Issued: Jul 14, 2018

Photo of the Submitted Sample



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CPS CONDITIONS OF SERVICE

The party that submits a completed service request form to Company or a gas quotation issued by the Company for its performance of services ("Services") is the "Client" under these Conditions of Service. The entity within the Bureau Veritas Consumer Products Services dMelex accepting the service request form and issuing the Report documenting the results of these Services is the "Company" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions (collectively, "Conditions"):

1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly prepared request, applicable protocols, written information, and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights; (ii) Client will not use and rely upon Company's Report for any product whose properties differ from the sample(s) upon which the Report is based; and (iii) any goods subject to inspection will be completely prepared for the type of inspection booked for the specified date. and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including certificates of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include testing or transaction: (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken or Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates producing or otherwise using the Report in any legal proceedings, it shall so notify Company or in submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it retains, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies. Company disclaims all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant, or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorneys and collection agencies' fees.

5. Intellectual Property. The names, service marks, trademarks and copyrights of Company and its affiliates (collectively, the "Marks") are and remain the sole property of Company and shall not be used by Client. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of Company or its affiliates. Client understands that any information or samples submitted to Company is a license for Company to use the same in the performance of Services.

6. Relationship. (a) Nothing herein creates a partnership, agency or joint venture between the Parties. (b) The failure to require strict observance or performance of any provision of these Conditions shall not be construed to be a waiver of a Party's right to later require strict observance and performance of the same. (c) Any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not invalidate the remainder of the Conditions. (d) For a period of two years after the commencement of this Agreement, Client shall not directly or indirectly try to solicit for employment any of Company's employees.

7. INDEMNITY. CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, ITS AFFILIATES, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD-PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH, OR EXPENSE OF WHATSOEVER NATURE, INCLUDING BUT NOT LIMITED TO CLAIMS ARISING FROM OR RELATING TO (I) THE PERFORMANCE OF ANY SERVICES BY COMPANY, (II) THE SALE, RESALE, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR (III) BREACH OF CLIENT'S OBLIGATIONS OR WARRANTIES HEREIN.

8. LIMITATIONS OF LIABILITY. (A) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PERFORMED, OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (B) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATSOEVER NATURE OR HOWSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. Force Majeure. If any event of force majeure or any event outside the control of Company occurs, Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

10. Governing Law. These Conditions shall be governed by the laws of the country as follows: for Services performed in (i) the Americas, the laws of New York, (ii) Asia Pacific, South Asia, Middle East and Africa, the laws of Hong Kong (except for China where PRC laws govern), and (iii) Europe, the laws of England.

11. Dispute Resolution. (a) If Client desires to assert a claim relating to the Services, it must submit the same to Company in writing setting forth with particularity the basis for such claim within 90 days from discovery of the claim and not more than six months after the date of issuance of the Report. Client waives any and all claims without limitation that it does not submit within such time periods. (b) If a dispute arises under this Agreement, the Parties shall first attempt good faith negotiations, failing which, the Parties (i) agree that the courts of the country of governing law shall have exclusive jurisdiction to settle any such dispute related to this Agreement and (ii) irrevocably waive their right to trial by jury in any such action or proceeding.

12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereat, and no modification is binding unless in writing. Any of Client's terms and conditions attached to, enclosed with or referred to in any order form, purchase order or other document shall not apply.

TEST REPORT

Report No:

(7418)144-02140(S1)

Jul 14, 2018

Page 2 of 4

TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	24.2	-	°C	APHA 20th Edition 2550B
2	Turbidity	0.2	-	NTU	APHA 2130 B
3	pH at 24°C*	8.4	-	-	FD-MTHD-007:2013 Reference to APHA 45001H
4	Nitrate (as NO ₃)	0.4	-	mg/l	APHA 4500 -NO ₃ E
5	Oil & Grease*	<2.0	2.0	mg/l	FD-MTHD-032:2013 Reference to APHA 5520B
6	Free Ammonia (as NH ₃)	<0.02	0.02	mg/l	SI.S 614 Appendix A: 2013
7	Salinity	37	-	ppt	APHA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPST-AN-00581-MTHD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	mg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	ND	0.001	mg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	



**BUREAU
VERITAS**

TEST REPORT

Report No:

(7418)144-0214D(SL)

Jul 14, 2018

Page 3 of 4

Remark –

***ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SLAB)**

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand.

APHA: American Public Health Association

ND: Not Detected, LOQ: Limit of Quantification,

NTU: Nephelometric Turbidity Units, °C : Celcius,

ICP-MS: Inductively Coupled Plasma – Mass Spectroscopy.

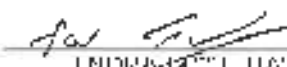
Contact Information for this report (Technical and General Inquiries and Feedback)

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FEED BACK:		
DHANUKA PERERA –EXECUTIVE QHSE	TLL: +94 768 229 479	E MAIL: dhanuka.perera@lk.bureauveritas.lum

REVIEWED BY: SHYAMIKA WICKRAMASINGHE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATORY

APPROVED BY: 
 INDRAJITH HATHURUSINGHA
 MANAGER
 FOOD LABORATORY



TEST REPORT

Report No:

(7418)144-0214D(SL)

Jul 11, 2018

Page 4 of 4

CPS CONDITIONS OF SERVICE

The purchaser hereby consents to the conditions of service of work to be carried out by the Company in its capacity of service provider in the Client under these Conditions of Service. This entry forms the Bureau Veritas Contract Product. Services to be provided are governed by the service request form and having the Report completed by the Service. The Company under these Conditions of Service, Company and Client are together, the "Parties" and each is a "Party". A request for Service constitutes a legally binding agreement with BUREAU VERITAS when such a request is accepted by the Company in Agreement with the relevant terms and conditions identified as "Conditions".

1. Services: (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report arising from the results of the Services based upon the availability of product, materials, samples, information and other available information (including but not limited to, the Client's name, address, telephone number, e-mail address, website, and other contact information) to an affiliate of Company or to an agent or subcontractor of Client or to Client or Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, if some of product samples furnished to Company for the Services are found not satisfactory in the course of performance of the Services, (b) Client represents and warrants to Company that the product sample provided is not subject to withdrawal or recall and that Client retains the property rights of Client and not the Company in Company's Report of the product sample provided and that the sample used upon the Report is 2556C, and that the goods placed in respect of which the Company performs the type of service requested for the specified date and that Client is responsible to, and retains the responsibility of, the various documents referred to government or other regulatory bodies, including certification of compliance required under the US Consumer Product Safety Improvement Act and EU Regulation under REACH regulation. Client is responsible for the safety of accuracy that apply with which Company has provided assistance to Client in preparation of the documents.

2. Report: (a) The Report shall contain the test data results to the Client, in a table or tables and circumstances as observed and recorded by Company at the time of performance of the Services, which are based on samples submitted and analyzed received from Client. Company shall have the right to update the Report after its issuance. Where the Services involve testing or inspection of the Report will set forth the findings of Company, which will refer to the product samples described therein and to the results of both the Report and to be construed as evidence or confirmation of the quality or characteristics of the item from which a tested sample was taken for Company's performance of Services. (b) The Report is issued solely to Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for promotional purposes, or used for advertising or public disclosure without the Company's prior written consent. Company is not responsible for any third party's interpretation of the Report and Client shall not use the Report for purposes of litigation, nor shall it, Company or its affiliates or employees, use the Report in any proceeding in which Company is not a named party. If Client anticipates publishing or otherwise using the Report in any legal proceeding, it must notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties: (a) Company undertakes due care and ordinary skill in the performance of the Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not bear the burden of proof or any other personal liability, including negligent, manufacturers, agents, buyers, defendants, and transportation or shipping companies. Company assumes no liability for any damages, including reasonable attorney's fees, incurred by Client from loss of or damage to property, if such a loss or damage occurs. (c) Company does not warrant or guarantee the accuracy of the Report and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment: Payment is to be made by due 30 days after the date of receipt of the Report and Company may reserve any amount claimed to Client. Client shall reimburse Company for all costs incurred in advance unless the Client has prepaid all or a portion of the fee. Payment and Company shall remain the sole responsibility of Client. Payment shall include all applicable taxes, duties, charges and collection costs, if any.

5. Intellectual Property: The names, service marks, trademarks and copyrights of Company and its affiliates (collectively, the "Markets") are and remain the sole property of Company and shall be used by Client. Client shall not use the name of the Markets for any purpose that is not directly related to the services provided with the Report or the image or reputation of Company or its affiliates. Client understands that any information or samples submitted to Company is for use by Company for use in the performance of Services.

6. Relationship: (a) There is no employer-employee relationship between the Parties. (b) The Parties to execute their obligations or performance under these Conditions shall not be construed to be a contract of a Party's right to be issued and disseminated and performance of the work. (c) The scope of these Conditions shall be limited to the work of the Parties and shall not include the performance of the Conditions. (d) For a period of five years after the commencement of this Agreement, Client shall not recruit or indirectly or directly employ any of Company's employees.

7. INDEMNITY: CLIENT SHALL HOLD COMPANY AND ITS AFFILIATES HARMLESS FROM ALL LIABILITY (INCLUDING BUT NOT LIMITED TO THE REPAIR, REPLACEMENT OR REPAIR OF DAMAGES TO PROPERTY OR EQUIPMENT), INCLUDING BUT NOT LIMITED TO CLAIMS ARISING FROM OR RELATED TO THE PERFORMANCE OF ANY SERVICES PROVIDED BY COMPANY IN THE USE OF REPORT, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR IN THE REPAIR OF CLIENTS' EQUIPMENT OR DAMAGE TO PROPERTY.

8. LIMITATIONS OF LIABILITY: (a) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL OR SPECIAL LOSS IN CONNECTION WITH THE REPORT IF PRODUCT FOR WHICH SERVICES WERE PERFORMED BY THE SERVICES PROVIDED BY COMPANY. INSTEAD, COMPANY SHALL NOT BE LIABLE FOR ANY LOSS UNLESS AND UNLESS RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS INCURRED OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN THE TIME PERIOD FOR COMPLETION DEFINED BY COMPANY. REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (b) THE ENTIRE LIABILITY AND LOSS LIABILITY OF COMPANY IN CONNECTION WITH THE LOSS OF THE REPORT OR DAMAGE TO PROPERTY SHALL BE LIMITED TO THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. Force Majeure: If any event of force majeure or any event outside the control of Company occurs, Company may immediately suspend or suspend its performance obligations without penalty, any liability or obligation to Client.

10. Governing Law: These Conditions shall be governed by the laws of the country in which the Services are performed, if the American, the laws of New York or New York, South Africa, United Kingdom, Hong Kong, Singapore, Malaysia, India, China, Japan, Korea, Australia, Canada, Mexico, Brazil, Russia, the State of Florida.

11. Dispute Resolution: (a) If Client desires to assert a claim relating to the Services, it must submit the claim to Company in writing within 90 days of the date of the Report for each claim with 30 days from the date of the Report. (b) The claimant shall bear the burden of proof for the claim. (c) Client shall not be liable for any costs without written notice and a claim for a claim with such time period. (d) If a dispute arises under the Agreement, the Parties shall first attempt to resolve the dispute through mediation. If the Parties do agree that the course of the country's governing law shall have resolved the dispute, then the Parties shall attempt to resolve the dispute through arbitration. If the Parties do not agree that the course of the country's governing law shall have resolved the dispute, then the Parties shall attempt to resolve the dispute through arbitration.

12. Terms, Conditions: The applicable terms, conditions and the Report received shall be understood as the Parties to the Report, which shall be read and construed as if they were a single document. Any of Client's terms and conditions intended to amend or be added to any order form, purchase order or other document shall be void.

Client: (7418)144-0214D(SL)

END OF THE REPORT.

CPG CONDITIONS OF SERVICE

The Party that submits a completed service request form to Company or signs a quotation issued by the Company for its performance of services ("Services") is the "Client" under these Conditions of Service. The entity within the Bureau Veritas Consumer Products Services division accepting the service request form and issuing the Report documenting the results of those Services is the "Company" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions (collectively, "Conditions"):

1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly accepted request, applicable protocols, written information and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights, (ii) Client will not use and rely upon Company's Report for any product whose properties differ from the sample(s) upon which the Report is based, and (iii) any goods subject to inspection will be properly prepared for the type of inspection booked for the specified date, and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including certificates of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection: (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client arranges producing or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it means, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies; Company disclaims all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of Invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorneys and collection agencies' fees.

5. Intellectual Property. The names, service marks, trademarks and copyrights of Company and its affiliates (collectively, the "Marks") are and remain the sole property of Company and shall not be used by Client. Client shall not contest the validity of the Marks or take any action that might impair the value or goodwill associated with the Marks or the image or reputation of Company or its affiliates. Client understands that any information or samples submitted to Company is a license for Company to use the same in the performance of Services.

6. Relationship. (a) Nothing herein creates a partnership, agency or joint venture between the Parties. (b) The failure to require strict observance or performance of any provision of these Conditions shall not be construed to be a waiver of a Party's right to later require strict observance and performance of the same. If any provision of these Conditions is held to be invalid or unenforceable, such invalidity shall not invalidate the remainder of the Conditions. (c) For a period of two years after the contract term of this Agreement, Client shall not directly or indirectly try to solicit for employment any of Company's employees.

7. INDEMNITY. CLIENT SHALL HOLD HARMLESS AND INDEMNIFY COMPANY, ITS AFFILIATES, AND THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES, AGENTS AND SUBCONTRACTORS AGAINST ALL THIRD-PARTY CLAIMS FOR LOSS, DAMAGE, INJURY, DEATH, OR EXPOSURE OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO CLAIMS ARISING FROM OR RELATING TO (I) THE PERFORMANCE OF ANY SERVICES BY COMPANY, (II) THE SALE, SERVICE, MANUFACTURE, DISTRIBUTION OR USE OF ANY OF CLIENT'S GOODS OR (III) BREACH OF CLIENT'S OBLIGATIONS OR WARRANTIES HEREIN.

8. LIMITATIONS OF LIABILITY. (A) COMPANY SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL OR SPECIAL LOSS IN CONNECTION WITH THE REPORT, THE PRODUCT FOR WHICH SERVICES WERE PERFORMED OR THE SERVICES PROVIDED BY COMPANY HEREUNDER. COMPANY SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE WHATSOEVER RESULTING FROM ANY DELAY IN THE PERFORMANCE OF ITS OBLIGATIONS HEREUNDER OR FROM THE FAILURE OF COMPANY TO PROVIDE ITS SERVICES WITHIN ANY TIME PERIOD FOR COMPLETION ESTIMATED BY COMPANY, REGARDLESS OF THE CAUSE OF THE DELAY OR FAILURE. (B) THE ENTIRE FINANCIAL AND LEGAL LIABILITY OF COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, INDEMNITY, CONTRIBUTION OR DAMAGE OF WHATEVER NATURE OR HOWSOEVER ARISING, SHALL NOT EXCEED AN AMOUNT EQUAL TO FIVE (5) TIMES THE AMOUNT OF FEES PAID TO COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

9. Force Majeure. If any event of force majeure or any event outside the control of Company occurs, Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

10. Governing Law. These Conditions shall be governed by the laws of the country as follows: for Services performed in (i) the Americas: the laws of New York, (ii) Asia Pacific, South Asia, Middle East and Africa: the laws of Hong Kong (except for China where PRC laws govern); and (iii) Europe: the laws of England.

11. Dispute Resolution. (a) If Client desires to assert a claim relating to the Services, it must submit the same to Company in writing setting forth with particularity the basis for such claim within 90 days from discovery of the claim and not more than six months after the date of issuance of the Report. Client waives any and all claims without limitation that it does not submit within such time periods. (b) If a dispute arises under this Agreement, the Parties shall first attempt good faith negotiations, failing which, the Parties (i) agree that the courts of the country of governing law shall have exclusive jurisdiction to settle any such dispute related to this Agreement and (ii) irrevocably waive their right to trial by jury in any such action or proceeding.

12. These Conditions, the applicable order form and/or quotation and the Report represent the entire understanding of the Parties on the subject matter hereof, and no modification is binding unless in writing. Any of Client's terms and conditions attached to, enclosed with or referred to in any order form, purchase order or other document shall not apply.



TEST REPORT

Report No:

(7418)144-0214F(SL)

Jul 14, 2018

Page 2 of 4

TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	24.2	-	°C	APHA 20th Edition – 2550B
2	Turbidity	0.3	-	NTU	APHA 2130 B
3	pH at 24°C*	8.4	-	-	FD-METHOD-007:2013 Reference to APHA 4500TT
4	Nitrate (as NO ₃ -)	0.5	-	mg/l	APHA 4500-NO ₃ - B
5	Oil & Grease*	<2.0	2.0	mg/l	FD-METHOD-032:2013 Reference to APHA 5520H
6	Free Ammonia (as NH ₃)	0.05	-	mg/l	SI 614 Appendix A: 2013
7	Salinity	36	-	ppt	APHA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPSTD-AN-00581-METHOD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	mg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	ND	0.001	mg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	



TEST REPORT

Report No: (7418)144-0214E(SL)

Jul 14, 2018

Page 3 of 4

Remark –

***ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SLAB)**

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand,
APHA: American Public Health Association
ND: Not Detected, LOQ: Limit of Quantification,
NTU: Nephelometric Turbidity Units, °C : Celcius,
ICP-MS: Inductively Coupled Plasma – Mass Spectroscopy.


Contact Information for this report (Technical and General Inquiries and Feedback)

GENERAL INQUIRIES:		
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REVIEWED BY: SHYAMIKA WICKRAKASINGHE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATORY

APPROVED BY: 
INDRAJITH HATHURUSINGHA
MANAGER
FOOD LABORATORY

CPG CONDITIONS OF SERVICE

The party that submits a completion service request form to Company or signs a contract issued by the Company for its performance of services ("Services") is the "Client" under these Conditions of Service. The entity within the Bureau Veritas Consumer Products Services division accepting the service request form and issuing the Report documenting the results of those Services is the "Company" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions (collectively, "Conditions"):

1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly accepted request, applicable standards, written information, and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights, (ii) Client will not use and rely upon Company's Report for any product trace properties (that from the samples) upon which the Report is based; and (iii) any goods subject to inspection will be completely prepared for the type of inspection booked for the specified date, and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including certificates of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documentation.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) relate solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services within the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include testing or inspection: (i) the Report will set forth the findings of Company solely with respect to the product samples identified herein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken or Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates and/or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it retains, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies; Company disclaims all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorney and collection agencies' fees.

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**BUREAU
VERITAS**

TEST REPORT

Report No:

(7418)144-0214F(SL)

Jul 14, 2018

Page 2 of 4

TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	24.2	-	°C	APIA 20th Edition – 2550B
2	Turbidity	0.2	-	NTU	APIA 2130 B
3	pH at 24°C*	8.4	-	-	FD-MTHD-007:2013 Reference to APIA 4500H-
4	Nitrate (as NO ₃)	0.3	-	mg/l	APIA 4500 -NO ₃ - I
5	Oil & Grease*	<2.0	2.0	mg/l	FD-MTHD-032:2013 Reference to APHA 5520B
6	Free Ammonia (as NH ₃)	0.05	-	mg/l	SLS 614: Appendix A: 2013
7	Salinity	37	-	ppt	APIA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPSID-AN-00581- MTHD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	mg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	0.003	-	mg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	

TEST REPORT

Report No: (7418)144-0214P(SL)

Jul 14, 2018

Page 3 of 4

Remark

***ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SLAB)**

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand,
 APIA: American Public Health Association
 ND: Not Detected, LOQ: Limit of Quantification,
 NTU: Nephelometric Turbidity Units. °C : Celsius,
 ICP-MS: Inductively Coupled Plasma Mass Spectroscopy.

Contact Information for this report (Technical and General Inquiries and Feedback)


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REVIEWED BY: SEYMIKA WICKRAMASINGHE

BUREAU VERITAS CONSUMER PRODUCTS SERVICES LANKA (PVT) LTD.

AUTHORIZED SIGNATURE

APPROVED BY:



INDRAJITH HATHURUSINGHA
 MANAGER -
 FOOD LABORATORY

CPS CONDITIONS OF SERVICE

The party that submits a completed service request form to Company or signs a custation issued by the Company for its performance of services ("Services") is the "Client" under these Conditions of Service. The entity within the Bureau Veritas Consumer Products Services division accepting the service request form and issuing the Report documenting the results of those Services is the "Company" under these Conditions of Service. Company and Client are, together, the "Parties" and each is a "Party". A request for Services constitutes a legally binding agreement on both Parties when such a request is accepted by the Company ("Agreement") under the following terms and conditions (collectively, "Conditions"):

1. Services. (a) The completion of the Services shall be evidenced by the Company's issuing to Client a written report setting forth the results of the Services based upon the properly accepted request, applicable protocols, written information, and where applicable, the product sample provided by Client to Company ("Report"). Company may delegate/assign the performance of all or a portion of the Services to an affiliate of Company or to an agent or subcontractor. Client shall provide to Company on a timely basis, all documents and information necessary to enable Company to properly perform the Services. Company may, in its sole discretion, dispose of product samples furnished to Company for the Services that were not destroyed in the course of performance of the Services. (b) Client represents and warrants to Company that (i) each product sample is not submitted in violation of a third party's intellectual property rights; (ii) Client will not use and rely upon Company's Report for any product whose properties differ from the sample(s) upon which the Report is based; and (iii) any goods subject to inspection will be completely prepared for the type of inspection booked for the specified date, and (c) Client accepts sole responsibility and liability for the accuracy of documents submitted to government or other regulatory bodies, including certificates of compliance required under the US Consumer Product Safety Improvement Act and EU requirements under REACH regulations. Client's responsibility and liability for accuracy shall apply even where Company has provided assistance to Client in preparation of such documents.

2. Report. (a) The Report shall (i) constitute the sole deliverable for the Services, (ii) refer solely to the facts and circumstances as observed and recorded by Company at the time of performance of the Services with the limits of written information and instructions received from Client; Company shall have no obligation to update the Report after its issuance. Where the Services include tasting or inspection (i) the Report will set forth the findings of Company solely with respect to the product samples identified therein and (ii) the results set forth in the Report are not to be construed as indicative or representative of the quality or characteristics of the lot from which a product sample was taken for Company's performance of Services. (b) The Report is issued solely by Company, is intended for the exclusive use of Client and its affiliates and, except as required by a regulatory body, shall not be published, used for advertising purposes, copied or replicated for distribution or publicly disclosed without Company's prior written consent. Company is not responsible for any third party's interpretation of the Report. (c) Client shall not request a Report for purposes of litigation, nor shall it list Company, its affiliates or employees as an expert in any proceeding without Company's prior written consent. If Client anticipates producing or otherwise using the Report in any legal proceedings, it shall so notify Company prior to submitting the Report in such proceeding.

3. Representations and Warranties. (a) Company undertakes due care and ordinary skill in the performance of its Services. (b) Client agrees that Company is neither an insurer nor a guarantor and does not take the place of Client or the third parties that it deals, including designers, manufacturers, agents, buyers, distributors, and transportation or shipping companies; Company disclaims all liability in such capacities. Client understands that, if it seeks to protect itself from claims of loss, damage or injury, it should obtain appropriate insurance. (c) Company does not warrant or guarantee Client's products, and Company's Report does not represent a warranty of merchantability, a warranty of fitness for a particular purpose, or any other warranty or guarantee.

4. Payment. Payment in full shall be due 30 days after the date of invoice, failing which Company may revoke any credit extended to Client. Client shall reimburse Company for (i) interest on overdue amounts from the due date until paid at an interest rate of 1.5% per month and (ii) any other costs Company incurs in collecting past due amounts, including court, attorney and collection agencies' fees.

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TEST REPORT

Report No:

(7418)144-0214G(SL)

Jul 14, 2018

Page 3 of 4

TEST RESULTS

No.	Parameters	Results	LOQ	Unit	Test Method
1	Temperature at Receiving	21,2	-	°C	APHA 20th Edition -- 2550B
2	Turbidity	0.2	-	NTU	APHA 2130 B
3	pH at 24°C*	8.2	-	-	FD-MTHD-007:2013 Reference to APHA 4500E+
4	Nitrate (as NO ₃ -)	0.5	-	mg/l	APHA 4500 -NO ₃ - B
5	Oil & Grease*	<2.0	2.0	mg/l	FD-MTHD-032:2013 Reference to APHA 5520H
6	Free Ammonia (as NH ₃)	<0.02	0.02	mg/l	SLS 614 Appendix A: 2013
7	Salinity	36	-	ppt	APHA 2520
Heavy Metals					
8	Arsenic (as As)*	ND	0.001	mg/l	CPSD-AN-00581-MTHD with ICP-MS
9	Cadmium (as Cd)*	ND	0.0001	mg/l	
10	Lead (as Pb)*	ND	0.001	mg/l	
11	Mercury (as Hg)*	ND	0.00005	µg/l	
12	Nickel (as Ni)*	ND	0.001	mg/l	
13	Copper (as Cu)*	ND	0.001	mg/l	
14	Zinc (as Zn)*	0.008	-	µg/l	
15	Chromium (as Cr)	ND	0.001	mg/l	



TEST REPORT

Report No:

(7418)144-02146(S1)

Jul 14, 2018

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***ISO 17025 :2005 ACCREDITED TEST BY SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT (SIAB)**

NOTE:

mg/l: milligrams per liter, ppt: parts per thousand,
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NTU: Nephelometric Turbidity Units, °C : Celsius,
ICP-MS: Inductively Coupled Plasma – Mass Spectrometry.

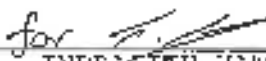
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REVIEWED BY: SHYAMKA WICKRAMASINGHE

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AUTHORIZED SIGNATORY

APPROVED BY: 
INDRAJITH HATHURUSINGHA
MANAGER -
FOOD LABORATORY

Environmental Impact Assessment for the Waste-to-Energy Plant Project in Thilafushi
Biodiversity and Critical Habitat Assessment



Prepared by: Aleef Naseem and Abdul Aleem (EIA P03/2019)



25th November 2019

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I. Introduction

1. The ADB Safeguard Policy Statement (ADB 2009) requires assessment of whether the project is planned in an area that may qualify as Critical Habitat or Natural Habitat. This assessment followed more detailed guidance in International Finance Corporation Performance Standard 6 and its recently updated accompanying guidance note (IFC 2012, 2019).
2. ADB SPS requires that any projects financed by ADB shall not implement project activities and components in area of critical habitat/s, unless (i) there are no measurable adverse impacts on the critical habitat that could impair its ability to function, (ii) there is no reduction in the population of any recognized endangered or critically endangered species, and (iii) any lesser impacts are mitigated. If a project is located within a legally protected area, ADB requires that the project implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (i) alternatives are not available, (ii) the overall benefits from the project substantially outweigh the environmental costs, and (iii) any conversion or degradation is appropriately mitigated. ADB SPS further requires the use of precautionary approach in the use, development, and management of renewable natural resources.
3. In order to assess whether the Greater Malé Waste-to-Energy Project (WTE project) is located in a critical habitat, an initial screening was undertaken using the Integrated Biodiversity Assessment Tool (IBAT).¹ Results show that the location of the WTE project is likely a critical habitat. Therefore, a critical habitat assessment is needed to confirm the results.
4. This biodiversity and critical habitat assessment is applicable to the WTE project. Apart from the information from the IBAT screening, this report is also based on the baseline information provided in the EIA for the WTE project, which was supported with literature review and field data collection.

II. Definition of Critical Habitat

5. Critical habitat is defined in ADB SPS (2009) as a subset of both natural and modified habitat that deserves particular attention. Critical habitat includes areas with high biodiversity value, including (i) habitat required for the survival of critically endangered or endangered species; (ii) areas having special significance for endemic or restricted-range species; (iii) sites that are critical for the survival of migratory species; (iv) areas supporting globally significant concentrations or numbers of individuals of congregatory species; (v) areas with unique assemblages of species or that are associated with key evolutionary processes or provide key ecosystem services; and (vi) areas having biodiversity of significant social, economic, or cultural importance to local communities.

¹ The Integrated Biodiversity Assessment Tool (IBAT) is a multi-institutional programme of work involving BirdLife International, Conservation International, IUCN, and UNEP-WCMC. IBAT provides a basic risk screening on biodiversity. It draws together information on globally recognised biodiversity information drawn from a number of IUCN's Knowledge Products: IUCN Red List of Threatened Species, Key Biodiversity Areas (priority sites for conservation) and Protected Planet/The World Database on Protected Areas (covering nationally and internationally recognised sites, including IUCN management categories I–VI, Ramsar Wetlands of International Importance and World Heritage sites).

IV. Thresholds of Critical Habitat

1. To identify if a certain species can qualify the project AoA as Critical Habitat, the IFC Guidance Note 6 (2019)² has been used.

V. Critical Habitat Screening and Assessment

2. Critical habitat screening considered critical habitat-qualifying biodiversity candidates identified within the EIA as actually or potentially present. In each case, reasons are identified for each biodiversity feature likely meeting or not meeting Critical Habitat. IBAT was used as the initial screening for critical habitat values. Performance Standard 6 (PS6) defines these values for critical habitat (PS6: para. 16) and legally protected and internationally recognized areas (PS6: para. 20). The IBAT was used to screen for known risks within a standard 50km buffer of the project area at Thilafushi (see **Error! Reference source not found.**).

VI. Criteria 1 – 3: Critically Endangered or Endangered Species, Endemic and/or Restricted-range species Migratory or Congregatory Species

3. Habitat of significant importance to priority species can trigger critical habitat status. IBAT was used to create a preliminary list of priority species that could occur within the AoA. This list is drawn from the IUCN Red List of Threatened Species (IUCN RL). Due to the uncertainty surrounding the assessment at this preliminary stage, the list of species for which Critical Habitat may be triggered is still provisional and will require further analysis as reiterated in the conclusion.

4. The justification for the assessment has been provided in Table 1.

5. It should be noted that this list is preliminary and other species not currently included or poorly represented such as birds, fish, and invertebrates may come to light and require inclusion following monitoring and field surveys, continued desk study, and stakeholder engagement during project implementation.

² https://www.ifc.org/wps/wcm/connect/5e0f3c0c-0aa4-4290-a0f8-4490b61de245/GN6_English_June-27-2019.pdf?MOD=AJPERES&CVID=mRQjZva

Table 1: Critical Habitat Screening Assessment

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Mammals				
Blue Whale <i>Balaenoptera musculus</i>	EN	-	M	About 5,000 individuals of this species survive today in three populations: North Atlantic, North Pacific, and the Southern Hemisphere. According to interviews with local people, there has been only few sightings of Blue Whales in Maldives waters and is regarded as an uncommon visitor to the Maldives. There is no recorded information that can confirm the regular occurrence of this species in the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs, at least seasonally. <i>Balaenoptera musculus</i> does not appear to qualify the Project area as Critical Habitat.
Birds				
Matsudaira's Storm-petrel <i>Oceanodroma matsudairae</i>	-	RS	M	Population is only known to breed on the Volcano Islands in southern Japan. After breeding the species move south across equatorial belt and then winters in the equatorial belt. Only recorded in Ha. Atoll (Anderson & Baldock 2001), which is not within the AoA. There is a possibility that the species could occur near the coast in the Project AoA. This is, however, unlikely given degradation and development in that area. Based on the available information, <10% of the species' range overlap the terrestrial AoA, and there is low likelihood that suitable habitat exists in the Project area. <i>Oceanodroma matsudairae</i> does not appear to qualify the Project area as Critical Habitat.

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Odonata				
<i>Enallagma maldivense</i>	CR	RS	-	<i>Enallagma maldivensis</i> is a species of damselfly. There is insufficient data available for this species. No data is available on its population size in the AoA nor population size for the entire country. Dragonflies normally are found in freshwater habitats. No information is available on the presence of freshwater habitats (e.g. ponds) in the AoA. On a precautionary basis, it is possible that the terrestrial AoA holds more than 0.5% of the global population of this globally Critically Endangered damselfly. As such, <i>Enallagma maldivense</i> qualifies the project AoA as Critical Habitat.
Fishes				
Pondicherry Shark <i>Carcharhinus hemiodon</i>	CR	-	-	The Pondicherry Shark is a rare shark found on the continental and insular shelves of the eastern Indian Ocean and the western Pacific, from India to New Guinea. Thought to be extinct, recently found near a seasonal fishing village in Sri Lanka. There have been no recorded sightings in Maldives. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Carcharhinus hemiodon</i> does not appear to qualify the Project area as Critical Habitat.
Bowmouth Guitar shark <i>Rhina ancylostoma</i>	VU*	-	-	Although this shark is found throughout coastal areas across the Indian Ocean, sightings of this species in Maldives is rare. There is no recorded information that can confirm the regular occurrence of this species in the AoA. There is no reason to suspect that the AoA holds disproportionately high or low populations. The Project only occupies a small percentage of the AoA and is not predicted to have broad-scale impacts. Without further information, it thus seems unlikely that the Project could have impacts on this shark that would impact it to a level that it would become Endangered. As such, <i>Rhina ancylostoma</i> does not qualify the Project area as Critical Habitat.

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Bottlenose Wedge shark <i>Rhynchobatus australiae</i>	CR	-	-	<p>The Bottlenose Wedgefish inhabits inshore waters on the continental shelves, specifically enclosed bays, estuaries, and coral reefs. It is found in South-East Asia and Australia.</p> <p>Although this shark is also found throughout coastal areas across the Indian Ocean, sightings of this species in Maldives is rare. There is no recorded information that can confirm the regular occurrence of this species in the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Rhynchobatus australiae</i> does not appear to qualify the Project area as Critical Habitat.</p>
Whale Shark <i>Rhincodon typus</i>	EN	-	-	<p>Whale sharks are commonly found within Maldives. A possible resident population exists in ADh. Atoll which is outside the AoA. Sightings are rare within the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Rhincodon typus</i> does not appear to qualify the Project area as Critical Habitat.</p>
Shortfin Mako Shark <i>Isurus oxyrinchus</i>	EN	-	M	<p>The Shortfin Mako is an offshore littoral and epipelagic species found occurring in tropical and warm-temperate waters of all oceans. It is a highly migratory species making extensive journeys of over 3,000 kilometers. This species is found throughout Maldives. However, occurrence close to the atolls is very rare. There is no recorded information that can confirm the regular occurrence of this species in the AoA, It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Isurus oxyrinchus</i> does not appear to qualify the Project area as Critical Habitat.</p>

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Great Hammerhead <i>Sphyrna mokarran</i>	EN	-	-	<i>Sphyrna mokarran</i> is a coastal-pelagic and semi-oceanic tropical hammerhead occurring close inshore and well offshore, over the continental shelves, island terraces, and in passes and lagoons of coral atolls, as well as over deep water near land. Sightings are seasonal during the start of North-east Monsoon. According to diver community, southern atolls have the most likelihood of sightings which fall outside the AoA. The great hammerhead ranges widely throughout the tropical waters of the world. For this reason, it is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Sphyrna mokarran</i> does not appear to qualify the Project area as Critical Habitat.
Ornate Eagle Ray <i>Aetomylaeus vespertilio</i>	EN	-	-	The Ornate Eagle Ray has a sporadic distribution in the Indo-West Pacific, including Maldives. It occurs on the inner continental shelf to depths of 110 m over soft sandy substrate. Rarely seen and one sighting at Landaa Giraavaru, Baa Atoll, Maldives was recorded on February 2018. This area is outside the AoA. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Aetomylaeus vespertilio</i> does not appear to qualify the Project area as Critical Habitat.
Longfin Mako <i>Isurus paucus</i>	EN	-	-	The Longfin Mako is widespread in tropical and warm temperate waters, and likely occurs in all oceans, although its distribution is poorly recorded. Sightings of this species in Maldives is rare. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Isurus paucus</i> does not appear to qualify the Project area as Critical Habitat.

Species Name	Criteria 1 CR or EN Species	Criteria 2 Endemic / Restricted Range Species	Criteria 3 Migratory / Congregatory Species	Rationale
Sky Emperor <i>Lethrinus mahsena</i>	EN	-	-	This species is found in coral reef habitats and adjacent sandy and seagrass areas. Commercially fished in most of its habitat, but there are no evidences that it happens in the Maldives as well. It is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Lethrinus mahsena</i> does not appear to qualify the Project area as Critical Habitat.
Echinoderms				
Golden Sandfish <i>Holothuria scabra</i> ; Golden Sandfish <i>Holothuria lessona</i> ; Black Teatfish <i>Holothuria nobilis</i>	EN	-	-	All these holothurian species are fished commercially, with some local populations in sharp decline due to overexploitation. All three species have a wide range across Indo-Pacific tropical seas. No information is available about the presence and abundance of these species in the project AoA; however, it is very unlikely that the Project AoA holds >0.5% of the global population of this species, and >5 pairs. <i>Holothuria spp.</i> do not appear to qualify the Project area as Critical Habitat.
Corals				
<i>Acropora rudis</i>	EN	-	-	This species is found in the northern Indian Ocean and the central Indo-Pacific. Found also in the Maldives, however, data lacks on population size. The AoA is already impacted and not all the reefs are in pristine conditions, and this species was also not found during the underwater surveys. It is extremely unlikely the Project AoA holds >0.5% of the global population of this species. <i>Acropora rudis</i> does not appear to qualify the Project area as Critical Habitat.

CR – Critically Endangered under IUCN Red List; EN – Endangered under the IUCN Red List; RS – Restricted Range Species under IUCN; M – migratory.

*- Recently changed to vulnerable status in IUCN Red List

VII. Criterion 4: Unique assemblages of species that are associated with key evolutionary processes

6. As is the case for the majority of Indo-Pacific islands, the Maldives Archipelago has been subject to long and extreme isolation that has allowed evolutionary processes to generate unique, endemic flora and fauna. Beyond this general context, however, there is no reason to believe that the terrestrial or aquatic AoA host particularly unusual or key evolutionary processes. Unique assemblages of species associated with key evolutionary processes thus do not qualify the Project area as Critical Habitat.

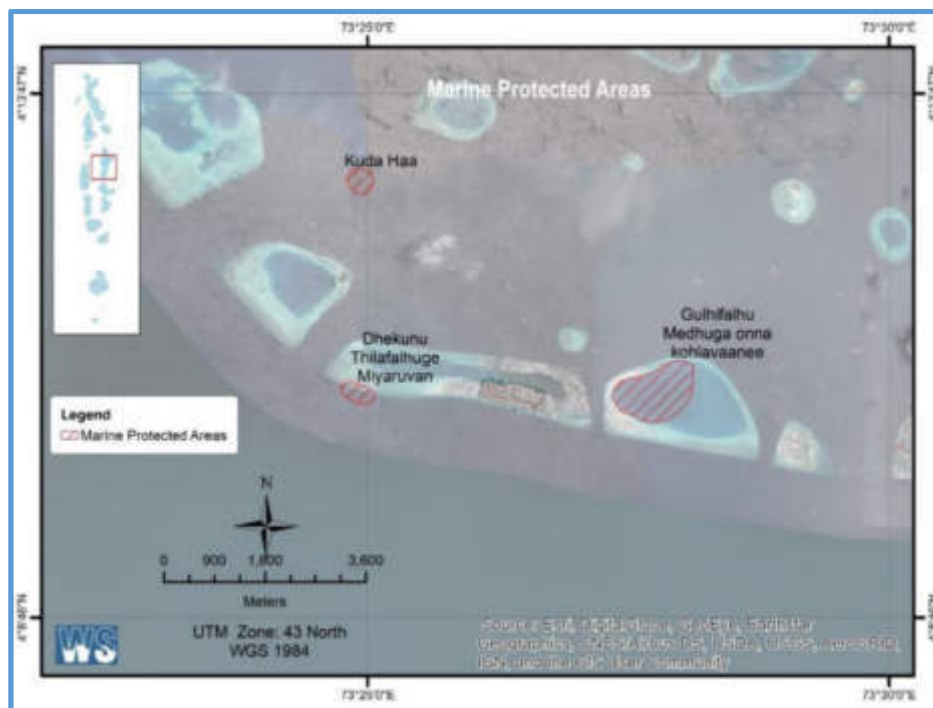
VIII. Criterion 5: Areas having biodiversity of significant social, economic, or cultural importance to local communities (including ecosystem services)

7. This additional assessment considers the ecosystem services from biodiversity in general. The assessment of significance of ecosystem services to local communities is assessed retrospectively in line with the consultation with local dive communities.

8. Ecosystem services affected by the project are prioritized when all three of the following criteria are met: (i) the project might affect the ability of others to benefit from the service; (ii) the affected service is important to beneficiaries' well-being; and (iii) beneficiaries do not have viable alternatives for that service.

9. The limited information presented does not give reason to believe that the Project terrestrial or aquatic AoA are sufficiently important to local people that they represent Critical Habitat under this criterion. However, it is beyond the scope of this assessment to collect additional information on ecosystem services, and then to assess which may qualify the project area as Critical Habitat.

Figure 2. 5km buffer zone from project site at Thilafushi



IX. Legally protected areas and internationally recognized areas

10. There are some areas near to the Project. The nearest MPA to the WTE project site is the “*Lions Head*” (Dhekunu Thilafalhuge Miyaruvani), around 1 km from the proposed plant. Additionally, as a precautionary approach, a more focused habitat assessment was conducted for this MPA. Results show that none of the IUCN species categorized as critically endangered species, endangered species or vulnerable species is found within this MPA. Results also show that none of nationally protected species is found within this MPA either. A complete assessment of the Lions Head is attached as Annex 2.

24. Following IFC (2019), none of the protected areas found in the Project AoA meets the thresholds for Critical Habitat for some species for which it was designated. For this reason, none of the protected areas found in the AoA qualify the Project area as Critical Habitat.

X. Conclusion and Recommendations

25. The WTE project will be established in Maldives, a country rich in biodiversity. Based on the initial screening using IBAT, the project site is likely to be a critical habitat at least for a terrestrial insect.

11. In the course of project implementation, it is highly recommended that continuous marine underwater monitoring be undertaken around Thilfushi island to confirm the extent of biodiversity in various seasons of the year, including assessment of features pertinent to critical habitats. In cases when future information determines the existence of critical habitat within the study area, the WTE project should be able to demonstrate that:

- (i) It does not lead to measurable adverse impacts on those biodiversity values for which the critical habitat was designated, and on the ecological processes supporting those biodiversity values;
- (ii) It does not lead to a net reduction in the global and/or national/regional population of any Critically Endangered or Endangered species over a reasonable period of time; and
- (iii) It has integrated into its management program a robust, appropriately designed, and long-term biodiversity monitoring and evaluation program.

REFERENCES

- Aeby, G., Lovell, E., Richards, Z., Delbeek, J.C., Reboton, C. & Bass, D. 2008. *Acropora rudis*. The IUCN Red List of Threatened Species 2008: e.T132913A3490569. <http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T132913A3490569.en>. Downloaded on 27 November 2019.
- Al Abdali, F.S.H., Al Buwaiqi, B., Al Kindi, A.S.M., Ambuali, A., Borsa, P., Govender, A. & Russell, B. 2019. *Lethrinus mahsena*. The IUCN Red List of Threatened Species 2019: e.T16720057A16722325. <http://dx.doi.org/10.2305/IUCN.UK.2019-2.RLTS.T16720057A16722325.en>. Downloaded on 27 November 2019.
- Anderson, C. and Bladock, M. (2001). New records of birds from the Maldives, with notes on other species. *Forktail*, 17, pp.67–73.
- BirdLife International (2019) Species factsheet: *Hydrobates matsudairae*. Downloaded from <http://www.birdlife.org> on 27/11/2019
- Compagno, L.J.V., White, W. & Fowler, S. (SSG Australia & Oceania Regional Workshop, March 2003) 2003. *Carcharhinus hemiodon*. The IUCN Red List of Threatened Species 2003: e.T39369A10185838. <http://dx.doi.org/10.2305/IUCN.UK.2003.RLTS.T39369A10185838.en>. Downloaded on 27 November 2019.
- Conand, C., Purcell, S. & Gamboa, R. 2013. *Holothuria lessoni*. The IUCN Red List of Threatened Species 2013: e.T180275A1609567. <http://dx.doi.org/10.2305/IUCN.UK.2013-1.RLTS.T180275A1609567.en>. Downloaded on 27 November 2019.
- Dow, R.A. 2009. *Enallagma maldivensis*. The IUCN Red List of Threatened Species 2009: e.T59716A11994224. <http://dx.doi.org/10.2305/IUCN.UK.2009-2.RLTS.T59716A11994224.en>. Downloaded on 27 November 2019.
- Denham, J., Stevens, J.D., Simpfendorfer, C., Heupel, M.R., Cliff, G., Morgan, A., Graham, R., Ducrocq, M., Dulvy, N.K., Seisay, M., Asber, M., Valenti, S.V., Litvinov, F., Martins, P., Lemine Ould Sidi, M., Tous, P. & Bucal, D. 2007. *Sphyrna mokarran*. The IUCN Red List of Threatened Species 2007: e.T39386A10191938. <http://dx.doi.org/10.2305/IUCN.UK.2007.RLTS.T39386A10191938.en>. Downloaded on 27 November 2019.
- Khadheeja Ali & Hussain Sinan, 2015. National Plan of Action for the Conservation and Management of Sharks. Ministry of Fisheries and agriculture.
- Kyne, P.M., Rigby, C.L., Dharmadi & Jabado, R.W. 2019. *Rhynchobatus australiae*. The IUCN Red List of Threatened Species 2019: e.T41853A68643043. <http://dx.doi.org/10.2305/IUCN.UK.2019-2.RLTS.T41853A68643043.en>. Downloaded on 27 November 2019.
- McAuley, R.B., Compagno, L.J.V. & Chin, A. 2016. *Rhina ancylostoma*. The IUCN Red List of Threatened Species 2016: e.T41848A68641634. <http://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T41848A68641634.en>. Downloaded on 27 November 2019.
- Nyawira Muthiga, 2018. Field observations of sea cucumbers at North Male Atoll in the Maldives. SPC Beche de Mer Information Bulletin #27 – March 2008
- Pierce, S.J. & Norman, B. 2016. *Rhincodon typus*. The IUCN Red List of Threatened Species 2016: e.T19488A2365291. <http://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T19488A2365291.en>. Downloaded on 27 November 2019.
- Rigby, C.L., Barreto, R., Carlson, J., Fernando, D., Fordham, S., Francis, M.P., Jabado, R.W., Liu, K.M., Marshall, A., Pacoureau, N., Romanov, E., Sherley, R.B. & Winker, H. 2019. *Isurus*

oxyrinchus. The IUCN Red List of Threatened Species 2019:
e.T39341A2903170. <http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T39341A2903170.en>. Downloaded on 27 November 2019.

Riley, M., Hale, M., Harman, A. and Rees, R. (2010). Analysis of whale shark *Rhincodon typus* aggregations near South Ari Atoll, Maldives Archipelago. *Aquatic Biology*, 8, pp.145-150.

Annex 1: IBAT assessment report



Integrated Biodiversity Assessment Tool

WORLD BANK GROUP BIODIVERSITY RISK SCREEN

Report generated on 20/11/2019 by Francesco Ricciardi under the license number 2780-5415 held by ADB. www.ibat-alliance.org

Project Name: Thilafushi WTE

Location: [4.2, 73.4]

Overlaps with:

Protected Areas	11
Key Biodiversity Areas	0
IUCN Red List	15
Critical Habitat	Likely



Displaying project location and buffers: 10.0 km, 50.0 km



This report is based on IFC Performance Standard 6 (PS6) but applies to World Bank Environmental and Social Standard 6 (ESS6)





About this report

IBAT provides initial screening for critical habitat values. Performance Standard 6 (PS6) defines these values for critical habitat (PS6, para. 16) and legally protected and internationally recognized areas (PS6, para. 20). PS6 will be triggered when IFC client activities are located in modified habitats containing "significant biodiversity value," natural habitats, critical habitats, legally protected areas, or areas that are internationally recognized for biodiversity. References to PS6 and Guidance Note 6 (GN6) are provided to guide further assessment and detailed definitions where necessary. Please see <https://www.ifc.org/ps6> for full details on PS6 and GN6.

The report screens for known risks within a standard 50km buffer of the coordinates used for analysis. This buffer is not intended to indicate the area of impact. The report can be used to:

- Scope risks to include within an assessment of risks and impacts
- Identify gaps within an existing assessment of risks and impacts
- Prioritize between sites in a portfolio for further assessment of risks and impacts
- Inform a preliminary determination of critical habitat
- Assess the need for engaging a biodiversity specialist
- Identify additional conservation experts or organizations to inform further assessment or planning

WARNING: IBAT aims to provide the most up-to-date and accurate information available at the time of analysis. There is however a possibility of incomplete, incorrect or out-of-date information. All findings in this report must be supported by further desktop review, consultation with experts and/or on-the-ground field assessment as described in PS6 and GN6. Please consult IBAT for any additional disclaimers or recommendations applicable to the information used to generate this report.

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Priority Species

Habitat of significant importance to priority species will trigger critical habitat status (See PS6; para 16). IBAT provides a preliminary list of priority species that could occur within the 50km buffer. This list is drawn from the IUCN Red List of Threatened Species (IUCN RL). This list should be used to guide any further assessment, with the aim of confirming known or likely occurrence of these species within the project area. It is also possible that further assessment may confirm occurrence of additional priority species not listed here. It is strongly encouraged that any new species information collected by the project be shared with species experts and/or IUCN wherever possible in order to improve IUCN datasets.

IUCN Red List of Threatened Species - CR & EN

The following species are potentially found within 50km of the area of interest.
For the full IUCN Red List please refer to the associated csv in the report folder.

Species name	Common name	IUCN Category	Group
<i>Carcharhinus hemiodon</i>	Pondicherry Shark	CR	CHONDRICHTHYES
<i>Rhina ancylostoma</i>	Bowmouth Guitarfish	CR	CHONDRICHTHYES
<i>Rhynchobatus australiae</i>	Bottlenose Wedgefish	CR	CHONDRICHTHYES
<i>Enallagma maldivense</i>		CR	INSECTA
<i>Balaenoptera musculus</i>	Blue Whale	EN	MAMMALIA
<i>Rhincodon typus</i>	Whale Shark	EN	CHONDRICHTHYES
<i>Isurus oxyrinchus</i>	Shortfin Mako	EN	CHONDRICHTHYES
<i>Sphyrna mokarran</i>	Great Hammerhead	EN	CHONDRICHTHYES
<i>Aetomylaeus vespertilio</i>	Ornate Eagle Ray	EN	CHONDRICHTHYES
<i>Isurus paucus</i>	Longfin Mako	EN	CHONDRICHTHYES
<i>Acropora rudis</i>		EN	ANTHOZOA



Biodiversity features which are likely to trigger Critical Habitat

Protected Areas

The following protected areas are found within 10.0 km and 50.0 km of the area of interest. For further details please refer to the associated csv file in the report folder.

Area name	Distance	Recommendation
Giravanu Kuda Haa	10.0 km	● Assess for biodiversity risk
Hans Hass Plave (Gulhi Falhu)	10.0 km	● Assess for biodiversity risk
Lions Head (Thilafalhu Miyaruvani)	10.0 km	● Assess for biodiversity risk
Banana reef (Gaathu Giri)	50.0 km	● Assess for biodiversity risk
Embudhoo Kanduolhi	50.0 km	● Assess for biodiversity risk
Guraidhoo Kandu	50.0 km	● Assess for biodiversity risk
Huraa Mangrove	50.0 km	● Assess for biodiversity risk
Makurudhoo Kandu	50.0 km	● Assess for biodiversity risk
Nassimo Thila (Lankan Thila)	50.0 km	● Assess for biodiversity risk
Rasfari	50.0 km	● Assess for biodiversity risk
Thanburudhoo Thila (HP Reef)	50.0 km	● Assess for biodiversity risk

Key Biodiversity Areas



The following key biodiversity areas are found within 10.0 km and 50.0 km of the area of interest. For further details please refer to the associated csv file in the report folder.

Area name	Distance	Recommendation
-----------	----------	----------------

Species with potential to occur

Area Taxonomic group	Total assessed species	Total (CR, EN & VU)	CR	EN	VU	NT	LC	DD
CHONDRICHTHYES	28	19	3	5	11	2	4	3
INSECTA	1	1	1	0	0	0	0	0
MAMMALIA	10	1	0	1	0	0	7	2
ANTHOZOA	124	23	0	1	22	40	53	6
HOLOTHUROIDEA	31	5	0	3	2	0	15	11
ACTINOPTERYGII	656	3	0	1	2	3	628	22
REPTILIA	2	1	0	0	1	0	1	0
AVES	36	2	0	0	2	4	30	0
MAGNOLIOPSIDA	5	0	0	0	0	0	5	0
AMPHIBIA	1	0	0	0	0	0	1	0
HYDROZOA	2	0	0	0	0	0	2	0
MALACOSTRACA	8	0	0	0	0	0	7	1
LILIOPSIDA	3	0	0	0	0	0	3	0

Area Taxonomic group	Total assessed species	Total (CR, EN & VU)	CR	EN	VU	NT	LC	DD
POLYPODIOPSIDA	1	0	0	0	0	0	1	0
GASTROPODA	66	0	0	0	0	0	65	1
BIVALVIA	1	0	0	0	0	0	1	0



Country-level summary

Coming soon





Recommended Experts and Organizations

For projects located in critical habitat, clients must ensure that external experts with regional expertise are involved in further assessment (GN6: GN22). Clients are encouraged to develop partnerships with recognized and credible conservation organizations and/or academic institutes, especially with respect to potential developments in natural or critical habitat (GN6: GN23). Where critical habitats are triggered by priority species, species specialists must be involved. IBAT provides data originally collected by a large network of national partners, while species information is sourced via the IUCN Red List and affiliated Species Specialist Groups. These experts and organizations are listed below. **Please note that this is not intended as a comprehensive list of organizations and experts. These organizations and experts are under no obligation to support any further assessment and do so entirely at their discretion and under their terms. Any views expressed or recommendations made by these stakeholders should not be attributed to the IFC or IBAT for IFC partners.**

Relevant national or regional organizations

IBAT integrates information developed by a global network of conservation agencies, organizations and experts. These efforts are coordinated by the IBAT Alliance (BirdLife International, Conservation International, IUCN and UNEP-WCMC) who compile and maintain this information as globally standardized databases. The focal partners most relevant to the area of analysis are:

Wild Bird Society of Japan Address: Maruwa Building, 3-9-23 Nishi-Gotanda, Shinagawa-ku, Tokyo 141-0031, Japan Web: <http://www.wbsj.org/>

BirdLife Asia Regional Office Address: 354 Tanglin Road, #01-16/17, Tanglin International Centre, Singapore 247672
Email: singapore.office@birdlife.org Web: <http://www.birdlife.org/asia/>

Directory for Species Survival Commission (SSC) Specialist Groups and Red List Authorities

URL: http://www.iucn.org/about/work/programmes/species/who_we_are/ssc_specialist_groups_and_red_list_authorities_directory/



Annex 2: Critical Habitat Assessment for Lions Head MPA



LIVE&LEARN
MALDIVES

FINAL REPORT

Baseline Socio Economic Survey in
Thilafushi and Gulhifalhu

TA 9327 - Greater Male' Environmental Improvement and Waste Management Project

August – September 2019

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1. Introduction

Asian Development Bank (ADB) requested and received assistance through the Ministry of Environment and Energy (MEE) for the services of Live and Learn Environment Education to carry out the baseline socio-economic survey of the residents of Thilafushi and Gulhifalhu which was a requirement of the Greater Male' Environmental Improvement and Waste Management Project.

The overall objective of this consultancy was to ascertain baseline socio economic profile of the residents in Thilafushi and Gulhifalhu islands. The survey also aimed to determine the current waste disposal practices, the needs and willingness of the companies operating in the islands to pay for waste management services. The results of the survey will be used for evidence-based planning and designing needs based socially inclusive strategies to maximize project benefits.

This document reports a summary of the purpose, methodology, sampling frame and strategy, data collection and analysis process, key findings of the study, limitations of the study and general recommendations.

2. Methodology

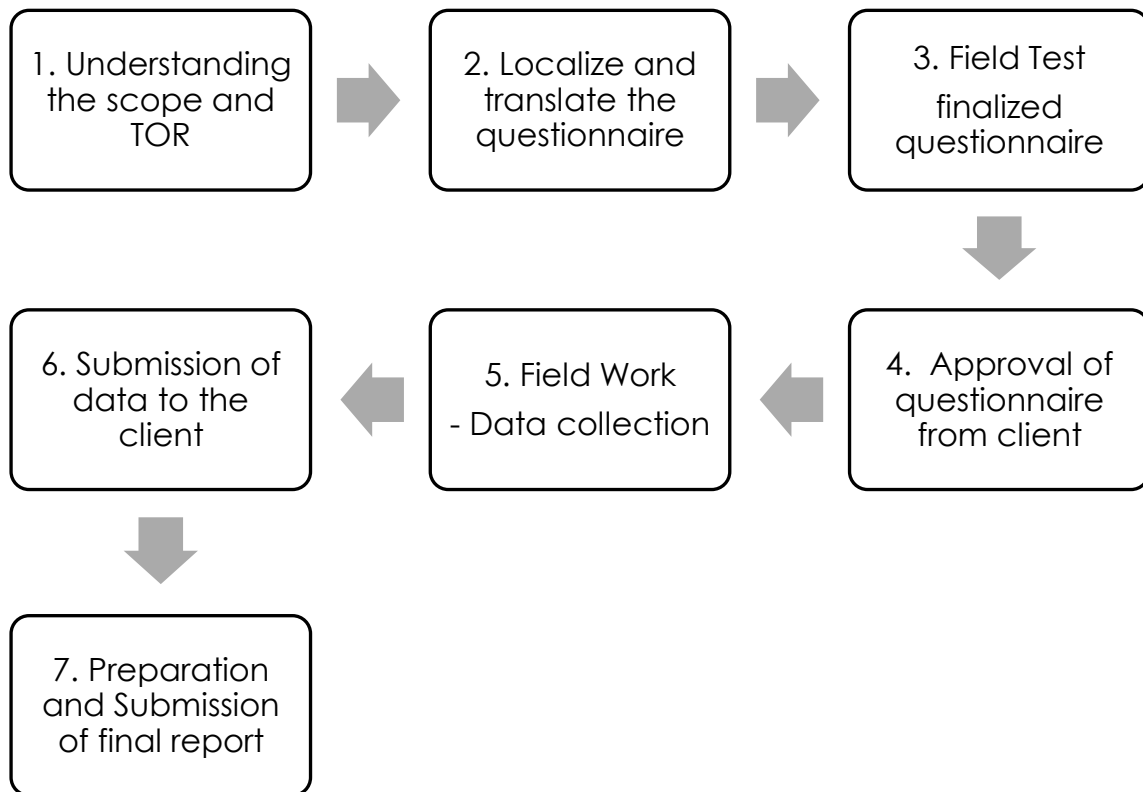
2.1 Objectives

The aim of this study was to ascertain baselines with regards to poverty and development indicators that included a set of socio- economic variables such as, education, occupation, economic status, access to basic services- including access to healthcare, accommodation, clean drinking water and food, and waste management. The survey targeted residents living and/or working in all areas in Thilafushi and Gulhifalhu islands.

2.2 Approach

The following schematic diagram summarizes the key steps of the approach that was followed to carry out the assignment.

Figure 1: Schematic diagram showing the work methodology



2.3 The Sampling Frame and Sampling Strategy

The survey was carried out in Thilafushi and Gulhifalhu islands. The survey was based on a core sets of information, an updated list of tenants obtained from Greater Male’ Industrial Zone Limited (GMIZL) and estimated number of workers on site. The survey sample represented a cross-section of the individuals working and/or residing in Thilafushi and Gulhifalhu Islands and the companies based in these two islands.

During the inception phase, Live and Learn identified the survey locations, sampling methodology and sample size. The sample size was based on instructions provided by the client. Specific instructions were provided to survey about 200 individuals living/ and or working in areas or sites that are close in proximity to the waste management site in Thilafushi. Survey locations were finalized with guidance from Thilafushi and Gulhifalhu management office, the Greater Male’ Industrial Zone Limited (GMIZL). According to the information received, not many companies were in areas close to the waste management site in Thilafushi. GMIZL highlighted that there are discrepancies in utility services available in the different zones of the island, that the “old Thilafushi” identified in the map as “silver plots” did not have water and sanitation services available. They also guided the survey team to identify the size and type of tenants in the different zones of the islands. Care was taken to ensure that the sample represented residents living/ and working in sites near all areas/ zones in the islands. To maximize on the quality, a comprehensive list of tenants was obtained from GMIZL. See *Appendix A* for the list of tenants located in Thilafushi, obtained from GMIZL and *Appendix B* for maps of Thilafushi and Gulhifalhu with the surveyed companies located.

2.4 Data Collection

2.4.1 Questionnaire

The survey was carried out using two questionnaires based on socio economic variables - one for individuals working and/ or residing in Thilafushi and Gulhifalhu and the other for companies based in Thilafushi and Gulhifalhu Islands. The sample covered 430 individuals (Thilafushi 374; Gulhifalhu 56) and 35 companies (Thilafushi 32; Gulhifalhu 3).

The questionnaires were developed to elicit the most important quantifiable data for this assessment. The questionnaires included various research questions that intended to get information for the research areas, specifically,

- a. Provision and accessibility to basic services including;
 - Accommodation
 - Food
 - Healthcare
- b. Expenses on basic needs and savings
- c. Waste management
- d. Factors influencing waste management practices
- e. Readiness to use improved waste management services

The questionnaires were modified in line with the societal norms, adapted to the local context and was translated in Dhivehi. The questionnaires were field-tested and refined based on the experience gained by the field test. The modified questionnaires are included in *Appendix C*.

2.5 Data Analysis

2.5.1 Data entry, analysis, synthesis and interpretation

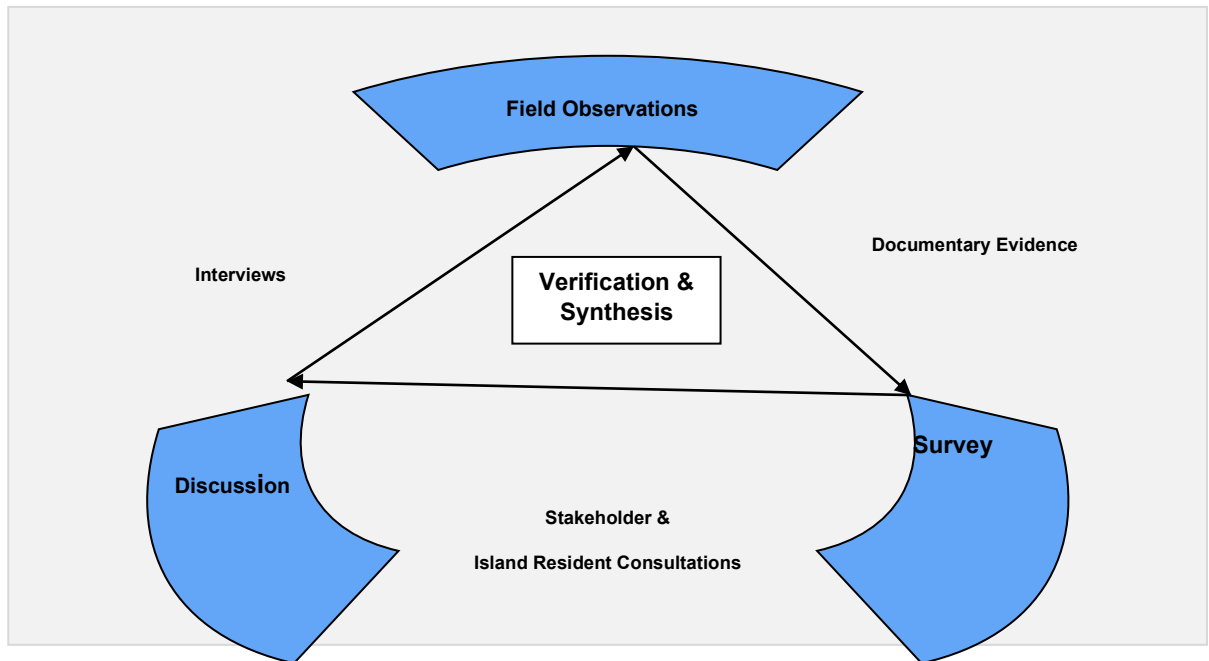
The questionnaires were filled by trained enumerators using tablet computers or smart phones in order to ensure efficiency and accuracy. The data were automatically entered, coded and fed into a central data base.

Data analysis and tabulation were carried out using a set of tables prepared by the Consultant's Team and shared with the client for feedback and comments.

2.5.2 Integration of Different Information Gathering Processes

Findings of field research were triangulated and documented to ensure their credibility and validity. Information gathered from the different sources were checked through comparisons and verification discussions. For example, information from surveys was cross checked with information gathered from discussions with client, project documents and observations. Consultant compared data mainly from these three sources prior to making conclusions and reporting. Evidence from secondary sources including stakeholder consultation and interviews were used as supplementary sources of information to support the findings gathered from the above three key sources. Following figure illustrates the triangulation process of data that was gathered from various methods under this study.

Figure 2: Triangulation of raw data collected from different methods



3. Key Findings

3.1 General Information

The survey respondents comprised of 1 female and 429 males. The respondents' ages ranged from 18 to 67 and are mostly Muslims (81%) and from Bangladesh (66%). The length of stay of the respondents in Maldives ranged from less than one year to more than 35 years. 78 percent of the respondents stated that they had a work visa or permit, 18 percent did not have a work visa or work permit and 3 percent did not want to respond to the question. Note that Maldivians (15%) do not need a permit to work in Thilafushi and Gulhifalhu. Hence, out of the 85 percent of foreign respondents, approximately 66 percent had a work visa or permit.

The education level of the respondents' showed that 9 percent did not have any education, 12 percent had basic literacy skills, 25 percent completed primary and 39 percent completed secondary education (secondary school and O'level), 7 percent have completed A'level and 4 percent have completed degree and above.

The education level was reflected in the job titles that the respondents hold as 54 percent of the respondents were unskilled labourers, 35 percent skilled workers, 7 percent at supervisor level, 1 percent at managerial level and 3 percent of the respondents' held jobs that were not categorized in any of the above mentioned categories.

The key points that emerged from the study are;

3.2 Income, Expenditure and Savings

- The self-assessed economic status showed that 24 percent respondents perceived themselves to be poor. The proportion of respondent who felt that they were in the lower middle-income level to middle income level constituted approximately 70 percent. Two percent respondents believed that they are rich.

- The highest expenditure for the respondents was estimated to be on communication (phone and internet) and the average monthly spent monthly ranged from MVR 500 to MVR 1500. The monthly expenditure on accommodation and basic needs such as utilities, food and drinks, and health care were borne by the employers and respondents had to spend minimal amount on these (Refer Table 1 below).

Table 1: Summary of expenditure

Expenditure (MVR)	Number of people who spent on:						
	B2. Food & Drinks	B3. House Rent	B4. House Maintenance	B5. Healthcare	B6. Electricity	B7. Water	B8. Communication
0-499	253	395	404	396	402	403	149
500-999	40	1	7	14	9	13	205
1000-1499	47	3	3	10	5	2	45
1500-1999	36	3	2	1	3	1	14
2000-2499	15	1	3	4	5	6	11
2500-2999	1	1	2	0	1	0	0
3000-3499	13	2	2	1	0	1	2
3500-3999	2	1	1	0	0	2	0
4000-4499	5	1	1	0	1	1	2
Above 5000	18	22	5	4	4	1	2

- The respondents stated that their average savings would be about 60 to 80 percent of the monthly income and 78 percent of the respondents send their savings to their families in respective countries.

Table 2: Summary of Income

Place of Residence	No. of respondents' – Summary of Income (MVR)			
	Below poverty line (<2000 MVR)	2001-4000	4001-6000	>6000
Male'	2	7	3	40
Thilafushi	19	46	140	119
Gulhifalhu	5	14	19	14
Boat	0	0	2	1
Other	1	0		2
Total	27	67	164	176

- Note: As indicated in the initial communications with the client, it was anticipated that a lot of people would hesitate to provide accurate data for income and expenditure, since the state is preparing to decree income tax. It appears that the data on expenditure and savings have errors and inconsistencies due to this. The main observation is that the lowest incomes estimated from the data received range from MVR200 to MVR500, some of whom are local and foreign nationals serving as technical/skilled employees. No local would work on a full-time job for a salary that is less than MVR5000, specifically in this job category. Additionally, the lowest income for foreign laborers will not be less than USD200, i.e., approximately 3000 per month.

3.3 Housing, Infrastructure and Basic Services

- Majority of the respondents lived in Thilafushi (74%) and the rest of the respondents lived in Male' (12%), Gulhifalhu (12%) and in a boat or a dhoni (1%).
- 46 percent of the respondents lived in shared rooms, 37 percent in living quarters, 14 percent in single rooms and 3 percent at the project worksite.
- In the majority of the accommodation that respondents lived, the walls are built with concrete blocks plastered with cement (60%) and the rest corrugated iron (25%), wood (12%) and stone (2%); and the roofs are mostly built with corrugated iron (87%).
- 58 percent of the respondents had a separate kitchen in their living premises and out of that 50% use cooking gas for cooking.
- Main sources of drinking water were house/building service connection (34%), public tap water from treated source (30%), bottled water (28%) and rainwater (4%). Similarly the source of water used for washing and bathing include house/building service connection (53%), public tap water from treated source (41%), and rainwater (2%)
- On average it was reported that respondents shared a toilet among 5 to 10 people and 96 percent of the toilets they used were flush latrine connected to piped sewer system. 15 respondents stated that they use alternated toilets and out of which 3 respondents used public toilets.
- For the question on whether respondents were aware of their rights, 39 percent said "Yes" and 61 percent said "No". In terms of respondents perception on what their basic rights were, majority said right to accommodation (33%) and the rest said right to food (30%), salary (29%), healthcare (29%), leave (26%), safe water and sanitation (26%) and number of working hours (23%).

3.4 Health Condition and Healthcare Services

- 68 percent of the respondents surveyed had a health insurance and 46 percent had a health issue past six months. The common issues reported were fever (65%) and cold (9%). Other issues reported include asthma, breathing problems, throat pain and other body aches and pains.
- 94 percent of those who reported sick saw a doctor and 96 percent went to a health facility in Male'. This could be because a health facility was opened in Thilafushi only recently (July 2019) and with limited facilities and services.

Table 3: Disease Incidence Summary

Place of Residence	No. of respondents'			
	Asthma/Lung related/Allergies/Cold, cough, fever	Water-borne diseases	Vector-borne diseases	Skin diseases
Male'	16	0	2	0
Thilafushi	125	0	6	5
Gulhifalhu	5	0	0	0
Boat	0	0	0	0
Other (Villimale and Hulhumale)	0	0	0	0
Total	146	0	8	5

Note: Records of water and air borne diseases are not available.

3.5 Solid Waste Management

- Majority of the respondents (66%) and companies (76%) highlighted that they are aware of the health issues related to garbage while 32 percent of the respondents' 24 percent of the companies said that they are not aware of such issues.
- 46 percent of the respondents believed that garbage is a huge problem in their locality, 19 percent of the respondents believed that it is a problem while 8 percent of the respondents reported that they rarely have issues and 25 percent respondents said not an issue at all. Similarly, 46 percent of the companies believed that garbage is a huge problem in their locality, 43 percent believed that it is a problem while 3 percent reported that they rarely have issues and 6 percent said not an issue at all.
- 67 of the respondents and 83 percent of the companies reported that the present practice of waste disposal in Thilafushi, including burning caused health issues and majority of the respondents said main problem was health problems due to air pollution and smoke (59%). Other problems stated include problems due to flies (4%) and problems due to contamination of lagoon (1%).

Solid waste management survey was mostly focused on to the companies based in Thilafushi and Gulheefalhu Islands and hence the key findings stated below in this section are based on the company responses.

- 69 percent reported that they segregate waste while 29 percent said that they do not. The companies who segregate waste reported that they segregate waste into plastics (31%), organics (32%), paper (14%) and metal (51%).
- 6 percent of the companies have received training on waste management while the majority 94 percent reported that they have not received any training in this area.

However, 71 percent companies stated that training on solid waste management will be beneficial.

- 37 percent companies said that they sell recyclable materials, while the majority 63 percent said that they do not sell recyclable waste materials.
- 29 percent of companies had door to door waste collection service and 71 percent opted for private arrangement. The frequency of waste collection or disposal services include: daily (9%), weekly (12%), monthly (3%) and irregular (6%).
- 9 percent of the companies reported that they use WAMCO's services for waste disposal. 91 percent said that they made private arrangements. This was evident from the responses as 71 percent of the companies stated that they were poorly satisfied with the present waste collection mechanism.
- 62 percent of the companies said they pay for waste collection and 38 percent said that they did not pay. The amount, companies who were paying for waste disposal, range from MVR 500 – MVR 40,000.
- From the companies currently not using the services of WAMCO for waste disposal, 85 percent stated that they will shift to WAMCO if services were improved and 9 percent said they did not want. In addition, 91 percent companies are willing to pay a reasonable amount to WAMCO if waste disposal practices were improved.
- Most companies (65%) were not aware about Government's program on Solid Waste Management (SWM) improvement through Ministry of environment and WAMCO.

3.6 Other Issues

Other socioeconomic issues, problems and concerns raised by the individual respondents and companies during the survey included:

- No electricity and water services available in some parts of Thilafushi
- No regulations on road safety and parking.
- No regular ferry services were available, hence, the residents had to hire speedboats if there was an emergency medical issue.
- Smoke inhalation is the main problem. Some days smoke becomes so thick that you will not be able to see the person standing next to you.
- No banks and other facilities available on the Islands and therefore, have to go to Male' to send money home.
- Currently, government charging a very high amount for waste disposal.
- Waste management is a hazard. Hope the government solves this problem soon

See *Appendix D* and *Appendix E* for graphical representation of data obtained from individual survey and company survey respectively.

4. Limitations

- Time constraints – Since the timeframe for data collection was about 4 days, data collection process was rushed and enumerators may have missed some information given by the respondents. In addition, had to seek permission from the companies to conduct the survey and since most of the companies' heads were based in Male, it was difficult to contact them within the time frame and hence, was not able to get some data such as number of employees from all the companies surveyed.
- Communication – The translators were briefed about the survey. However, even translators were not able to comprehend some questions such as “Are you aware of your rights?” and explain to respondents. One reason for this could be that translators competency in formal Dhivehi language may be limited.
- Reluctant or refused to give information on certain questions such as salary and company assets.

5. Recommendations

- Conduct regular assessments of the risk factors involved for residents of Thilafushi and Gulheefalhu and establish mechanisms to reduce risk factors including health hazards.
- Enhance health facility at Thilafushi with improved services to deal with emergency at all times.
- Have schedule ferries at night.
- Develop and improve the current waste management system used
 - Regular collection of waste
 - Create awareness and provide training on proper waste management and individual responsibility
 - Establish a system to collect payment based on the amount of garbage
 - Enact laws and regulations. Penalize those do not abide by the regulations
 - Train WAMCO staff on customer care and establish a grievance procedure and an efficient complaints system
 - Manage waste and abolish burning of waste to minimize health hazards.

APPENDICES

APPENDIX A: List of Tenants Located in Thilafushi

TENANT REGISTRY SHEET GREATER MALE' INDUSTRIAL ZONE LIMITED				
#	TENANT NAME	ZONE	LOCATION	TYPE OF WORK
1	Aasandha Company Limited	Silver	Thilafushi 01	File Storage
2	Waste Management Corporation Limited	-	-	Waste management
3	Villa Hakatha Pvt Ltd	Platinum Plot	Thilafushi 02	LPG storage and refilling plant, bulk cement station, cement packing plant, cement storage, diesel petrol kerosene storage tank, LPG and oxygen, sale of cement and oil, warehousing and All works allowed in Thilafushi
4	Heavy Load Maldives Pvt Ltd			Loading and unloading harbor, warehousing and labor accomodation
5	MTCC	Platinum Plot	Thilafushi 02	Warehousing and slipway
6	MTCC	Gold Plot	Thilafushi 02	Boat building and boat repair
7	Silver Sands Pvt Ltd	Gold Plot	Thilafushi 01	Boat repair and slipway
8	Yacht Tours Maldives	-	-	Slipway work
9	Nalahiya Tradings Pvt Ltd	Platinum Plot	Thilafushi 02	Warehouse of construction materials Shop (by letter no: TCL-PRJ/PRIV/2018/005)
10	State Trading Organization Plc Ltd	Gold Plot	Thilafushi 02	Warehousing
11	Fuel Express Maldves Pvt Ltd	Platinum Plot	Thilafushi 01	Vessel building and servicing fiber glass work
12	Fuel Express Maldves Pvt Ltd	Platinum Plot	Thilafushi 01	Vessel building and servicing fiber glass work
13	Maldives Ports Limited	Platinum Plot	Thilafushi 01	Boat building and boat repair
14	Maldiv Gas Pvt Ltd	Platinum Plot	Thilafushi 01	LPG refilling
15	Villa Shipping & Trading Co. Pvt Ltd	Gold Plot	Thilafushi 02	Cooking gas, cement, oxygen tank, diesel, petrol, kerosene storage and sale ,warehousing , boat building and repair ,slipway, engine repair and maintenance workshop for land and sea vessel and labor accommodation
16	Apollo Holdings Pvt Ltd	Platinum Plot	Thilafushi 02	All Works allowed in Thilafushi
17	Sun Transport Pvt Ltd	TIZ	TIZ	Boat Yard
18	Maldiv Gas Pvt Ltd	Platinum Plot	Thilafushi 01	LPG
19	Gulf Craft Service Centre Maldives Pvt Ltd	Gold Plot	Thilafushi 02	Speed boat building and repair

20	Gulf Craft Service Centre Maldives Pvt Ltd	Gold Plot	Thilafushi 02	Vessel work
21	Nalahiya Tradings Pvt Ltd	Gold Plot	Thilafushi 02	Warehouse of construction materials
22	Universal Enterprises Pvt Ltd	Platinum Plot	Thilafushi 01	Boat repair
23	Ahmed Luthfee	Platinum Plot	Thilafushi 01	Fiber glass speed boat & fishing boat building and boat repair
24	R.K.L Group Pvt Ltd	Platinum Plot	Thilafushi 01	Warehousing and related works, Cement brick and related works, heavy vehicle parking and repairing related works, land and sea vessel building and repairing and related works
25	Coastline Investments Pvt Ltd	Platinum Plot	Thilafushi 01	Warehousing
26	Al Shaali Marine Maldives Pvt Ltd	Platinum Plot	Thilafushi 01	Vessel repair
27	Coastline Investments Pvt Ltd	Platinum Plot	Thilafushi 01	Vessel repair, all works allowed in Thilafushi, diesel storage tank and warehousing
28	VA Pvt Ltd	Platinum Plot	Thilafushi 02	Warehousing
29	Nalahiya Construction Material	platinum Plot	Thilafushi 02	Warehousing
30	Agas Maldives Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing & land and sea vessel building
31	Uniforce Investment Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing and land and sea vessel building
32	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Vessel repair
33	Fuel Supplies Maldives Pvt Ltd	Platinum Plot	Thilafushi 01	Vessel building and repair, workshop, labor accommodation and warehousing
34	State Trading Organization Plc Ltd	-	-	N/A
35	Maldives Structural Products Pvt Ltd	Gold Plot	Thilafushi 02	Production of metal sheet
36	Static Company Pvt Ltd	Gold Plot	Thilafushi 01	RO plant workshop (desalination plant manufacturing), workshop (welding, lathing, engineering and repair works, panel making), fiber works, warehousing and labor accommodation
37	Villa Hakatha Pvt Ltd	Gold Plot	Thilafushi 02	All works allowed in Thilafushi
38	Waste Management Corporation Limited	-	-	warehousing, accommodation block, parking, garage, recycle facility and office building
39	Tommy Engineering Pvt Ltd			Boat Yard
40	Ministry of Defence and National Security	-	-	MNDF works

41	State Electric Company Ltd	Silver Plot	Thilafushi 02	Electricity services to Thilafushi
42	Apollo Holdings Pvt Ltd	Gold Plot	Thilafushi 02	All Works allowed in Thilafushi
43	Apollo Holdings Pvt Ltd	Gold Plot	Thilafushi 02	All Works allowed in Thilafushi
44	Timber House Pvt Ltd	Silver Plot	TIZ	Wood storage and other works
45	The Hawks Pvt Ltd	Platinum Plot	Thilafushi 01	Retail shop, oil supply, brick work, café and boat building
46	Secure Bag (Maldives) Pvt Ltd	Gold Plot	Thilafushi 01	-
47	Muni Enterprises Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
48	A.H. Brothers Pvt Ltd	Silver	Thilafushi 01	Warehousing
49	Alia Investments Pvt Ltd	TIZ	TIZ	Auto Mobile/ Motor Vehicle
50	Amin Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and Carpentry work
51	Apollo Holdings Pvt Ltd	Gold Plot	Thilafushi 02	All Works allowed in Thilafushi
52	Ego Maldives Pvt Ltd	TIZ	TIZ	Warehousing and Carpentry work
53	Marine Export & Trading Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and vehicle repair
54	Rainbow Aluminum Pvt Ltd	Gold Plot	Thilafushi 02	Construction work and aluminum works
55	Rainbow Enterprises	Gold Plot	Thilafushi 02	Warehousing, Furniture production and related works
56	Vimla Construction and Trade Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing, carpentry and labor accommodation
57	Alia Investments Pvt Ltd	TIZ	TIZ	Industrial Equipments/ Marine Power Generation
58	Moosa Kaleem	Silver Plot	-	Warehousing of construction materials, hardware materials GI pipe and structural beam
59	Heavy Dockyard Maldives Pvt Ltd	Platinum Plot	Thilafushi 01	All Works allowed in Thilafushi
60	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
61	Universal Enterprises Pvt Ltd	Platinum Plot	Thilafushi 01	Warehousing
62	Mild Steel Maldives Pvt Ltd	Gold Plot	Thilafushi 01	Boat yard
63	Sonee Hardware Pvt Ltd	TIZ	TIZ	General hardware and Warehousing
64	Sonee Hardware Pvt Ltd	TIZ	TIZ	General hardware and Warehousing
65	Sonee Hardware Pvt Ltd	TIZ	TIZ	General hardware and Warehousing
66	Mafhaa Private Limited	Gold Plot	Thilafushi 01	Boat building and boat repair
67	Coastline Investments Pvt Ltd	Platinum Plot	Thilafushi 01	Warehousing
68	Heavy Dockyard Maldives Pvt Ltd	Platinum Plot	Thilafushi 01	All Works allowed in Thilafushi
69	Aima Construction Pvt Ltd	TIZ	TIZ	brick works

70	Umet Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and construction work
71	Mohamed Manik	Gold Plot	Thilafushi 01	Warehousing
72	Sunfront Pvt Ltd	-	-	Warehousing
73	MWSC	TIZ	TIZ	Water production and distribution system
74	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
75	Apollo Holdings Pvt Ltd	Platinum Plot	Thilafushi 02	All Works allowed in Thilafushi
76	Maldive Gas Pvt Ltd	Platinum Plot	Thilafushi 01	Buffer zone
77	Sunfront Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing
78	Far Horizon Pvt Ltd	Silver Plot	Thilafushi 01	Fish processing plant, ice plant, aquaponics, fiber tub construction, boat construction and boat repair
79	Maziya Service Pvt Ltd	TIZ	TIZ	fabrication and wood work
80	Maldives Ports Limited	-	-	Vehicle storage
81	Sun Transport Pvt Ltd	TIZ	TIZ	Godown ,carpentary , fiber glass works and workshop
82	Abdul Latheef	TIZ	TIZ	Alluminium Workshop
83	Maldives Petroleum Link Pvt Ltd	Platinum Plot	Thilafushi 01	Warehousing and oil works
84	Vermillion International Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing, boat building, machanicale engineering and brick production
85	Simdi Company Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing
86	Nazaki Aluminium Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and aluminum workshop
87	Heavy Load Maldives Pvt Ltd	Silver Plot	Thilafushi 01	All works allowed in Thilafushi
88	Marine Export & Trading Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
89	Leo Trading Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing, parking , vehicle repair and temporary labor accommodation
90	Beach Marine Pvt ltd	TIZ	TIZ	Workshop
91	Aaru Pvt Ltd	Silver	Thilafushi 01	Warehousing
92	Abbas Abdulla	Gold	Thilafushi 02	Warehousing of Construction Materials
93	Agas Maldives Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing
94	Ahmed Mujah	Silver Plot	Thilafushi 01	Warehousing, Work shop and live fish
95	Aima Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing & Carpentry
96	Ali Abdulla	Gold Plot	Thilafuhsi 2	Warehousing/Construction Materials
97	Ali Muththalib	TIZ	TIZ	Warehousing, fiber works & workshop
98	Al Shaali Marine Maldives Pvt Ltd	Platinum Plot	Thilafushi 01	Vessel repair
99	Apollo Holdings Pvt Ltd	Platinum Plot	Thilafushi 02	All Works allowed in Thilafushi
100	Aries Enterprises Pvt Ltd	TIZ	TIZ	Warehousing

101	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
102	FW Construction Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and workshop
103	Fuel Supplies Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Oil works
104	Maldives Petroleum Link Pvt Ltd	Platinum Plot	Thilafushi 01	Workshop and oil works
105	Heavy Force Pvt Ltd	Gold Plot	Thilafushi 01	Vehicle repair
106	Ibrahim Abdul Latheef	-	-	Workshop
107	Ismail Shafeeu	Silver Plot	Thilafushi 01	Warehousing
108	M.T Hojgaard Pvt Ltd	TIZ	TIZ	Concrete work, carpentry, welding and boat repair
109	Nakachafushi Island Resort	Silver Plot	Thilafushi 01	Warehousing
110	Nalahiya Tradings Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
111	Olhahali Investment Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing
112	Reollo Enterprise Pvt Ltd	TIZ	TIZ	Warehousing and workshop
113	Sunfront Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing
114	Sunfront Pvt Ltd	Gold Plot	Thilafushi 01	Warehousing
115	Sunland Trading Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
116	Tep Construction Pvt Ltd	TIZ	TIZ	Warehousing of Construction Materials
117	Vista Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and construction work
118	Amin Construction Pvt Ltd	TIZ	TIZ	Warehousing
119	Ahmed Luthfee	Silver Plot	Thilafushi 01	Fiber glass speed boat & fishing boat building and boat repair
120	Moosa Kaleem	Silver Plot	Thilafushi 01	Warehousing
121	Adam Ibrahim	Silver	Thilafushi 01	Warehousing
122	Alia Construction Pvt Ltd	TIZ	TIZ	Warehousing, workshop, carpentry, labor quarter, vessel building, garage and parking zone
123	Umar Zahir	Silver Plot	Thilafushi 01	Warehousing
124	Sandcays Pvt Ltd	TIZ	TIZ	Warehousing and labor accommodation
125	Mohamed Ahmed Abdulla	Silver Plot	Thilafushi 01	Warehousing
126	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Vessel repair and vessel building
127	Hussain Mohamed Fulhu	Silver Plot	Thilafushi 01	All works allowed in Thilafushi
128	Marine Coral Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
129	Mohamed Moosa	Silver Plot	Thilafushi 01	Warehousing
130	Ibrahim Rasheed Ali	Silver Plot	Thilafushi 01	Wood warehousing and wood works
131	Waste Management Corporation Limited	-	-	warehousing, accommodation block, parking, garage, recycle facility and office building

132	Mass Enterprises Pvt Ltd	Silver Plot	Thilafushi 01	Wood warehousing and wood works
133	Aima Construction Pvt Ltd	TIZ	TIZ	Vehicle and Barge repair
134	Ali Naashid	Silver Plot	Thilafushi 01	Wood warehousing & wood works
135	Alia Investments Pvt Ltd	Silver Plot	Thilafushi 01	Wood warehousing and wood works
136	FW Construction Company Pvt Ltd	Silver Plot	Thilafushi 01	Wood warehousing and wood works
137	Far Horizon Pvt Ltd	Silver Plot	Thilafushi 01	Wood warehousing and wood works
138	Ibrahim Hassan	Silver Plot	Thilafushi 01	Wood warehousing and wood works
139	Onus Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
140	Sunfront Pvt Ltd	-	-	Warehousing and Carpentry work
141	Timber House Pvt Ltd	Silver Plot	Thilafushi 01	Wood storage and other works
142	Timber Trade Pvt Ltd	Silver Plot	Thilafushi 01	Wood storage and other works
143	Ali Shareef	Silver Plot	Thilafushi 01	Warehousing
144	Ahmed Sinah	Platinum Plot	Thilafushi 01	Dockyard
145	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	All works allowed in Thilafushi
146	Maldives Petroleum Link Pvt Ltd	Platinum Plot	Thilafushi 01	Warehousing
147	Heavy Load Maldives Pvt Ltd	Silver Plot	Thilafushi 01	All works allowed in Thilafushi, except works stated in clause 12 of the agreement.
148	Aaru Pvt Ltd	Silver	Thilafushi 01	Warehousing
149	Hello Maldives Pvt Ltd	Gold Plot	Thilafushi 01	Fish processing plant, ice plant, aquaponics, fiber tub construction, boat construction and boat repair
150	Silver Sands Pvt Ltd	Gold Plot	Thilafushi 01	All works allowed in Thilafushi
151	Bio Diversity Education and Awareness Maldives (BEAM)	-	-	Collecting, segregating and bailing ocean plastic
152	Marine Coral Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and brick works
153	Damas Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and workshop
154	Leo Trading Pvt Ltd	Gold Plot	-	Warehousing and workshop (Heavy vehicle maintenance and services)
155	Mild Steel Maldives Pvt Ltd	-	-	Warehousing
156	Maldives Structural Products Pvt Ltd	Gold Plot	Thilafushi 02	Warehousing
157	Island Engineering Services and Supplies Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
158	Static Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
159	Damas Company Pvt Ltd	Silver Plot	Thilafushi 01	Vehicle repair and vehicle storage

160	The Hawks Pvt Ltd	Silver Plot	Thilafushi 01	Bric work, fiber work and carpentry
161	Hussain Khalid	Silver Plot	Thilafushi 01	Warehousing, hotel, shop and labor accommodation
162	Ismail Adil	Silver Plot	Thilafushi 01	Warehousing
163	Hassan Haleem	Silver Plot	Thilafushi 01	Brick work
164	Mohamed Sameer	Silver Plot	Thilafushi 01	Brick work
165	Tep Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing of Construction Materials
166	Monaza Contracting Company Pvt Ltd	Silver Plot	Thilafushi 01	Carpentry, staff accommodation, café, workshop and saloon
167	Mohamed Majid	Silver Plot	Thilafushi 01	Warehousing and Tailor work
168	SarooF Naazim	TIZ	TIZ	Non Flammable works
169	Aaru Pvt Ltd	Silver	Thilafushi 01	Labor Accommodation
170	Agas Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
171	Ahmed Sameeru	Silver Plot	Thilafushi 01	Warehousing
172	Ahmed Sinah	TIZ	TIZ	Warehousing
173	Ahmed Zareer	TIZ	TIZ	Warehousing
174	Aima Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
175	Aima Construction Pvt Ltd	Silver Plot	Thilafushi 01	All works allowed in Thilafushi
176	Ali Ibrahim Rashid	TIZ	TIZ	Warehousing
177	Apollo Holdings Pvt Ltd	Platinum Plot	Thilafushi 02	All Works allowed in Thilafushi
178	Asian Power Investment Pvt Ltd	TIZ	TIZ	Warehousing and workshop
179	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and vehicle repair
180	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
181	Dhivehi Meysthiri Pvt Ltd	Silver Plot	Thilafushi 01	All Works allowed in Thilafushi
182	Dhivehi Meysthiri Pvt Ltd	Silver Plot	Thilafushi 01	Carpentry
183	Dynamic Construction and Trading Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and brick works
184	Farifeyran Pvt Ltd	Silver Plot	Thilafushi 01	Brick work, warehousing, cement works, carpentry, workshop, metal works, fiber works, sale of wood and hardware construction work
185	Faunu Enterprises Pvt Ltd	Gold Plot	Thilafushi 01	Vessel repair Shop (by letter no: TCL-LEGAL/PRIV/2018/025)
186	Haajaraa Workshop	Silver Plot	Thilafushi 01	Warehousing and machinery repair
187	Maldives Petroleum Link Pvt Ltd	TIZ	TIZ	Warehousing, labor accommodation and maintenances work
188	Maldives Petroleum Link Pvt Ltd	TIZ	TIZ	Warehousing, labor accommodation and maintenances work

189	Ibrahim Majid	TIZ	TIZ	Warehousing and Compact works of steel and plastic
190	Ilyas	Silver Plot	Thilafushi 01	Workshop
191	Ismail Hilmy	Silver Plot	Thilafushi 01	Warehousing
192	Ismail Zahir	TIZ	TIZ	Vessel repair
193	Ives Pvt Ltd	TIZ	TIZ	Warehousing and workshop
194	Jausa Holdings Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
195	LuckyHiya Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and Carpentry work
196	Maldives Road Development Corporation Limited	Silver Plot	Thilafushi 01	Brick works site office
197	Mohamed Moosa	Silver Plot	Thilafushi 01	Brick work, warehousing, cement works, carpentry, workshop, metal works, fiber works, sale of wood and hardware construction work
198	Mohamed Naasih	Silver Plot	Thilafushi 01	Vehicle repair
199	Mohamed Shareef	TIZ	TIZ	Warehousing and services
200	Muaz Mohamed	TIZ	TIZ	Warehousing
201	Muni Enterprises Pvt Ltd	TIZ	TIZ	Carpentry
202	MWSC	Platinum Plot	Thilafushi 01	Water plant and other water related works
203	MWSC	Platinum Plot	Thilafushi 01	Water supply for Thilafushi
204	Ocean Brilliant Sea Food International Pvt Ltd	TIZ	TIZ	Fish processing
205	Prop Pvt Ltd	-	-	N/A
206	Rasheed Carpentry & Construction Pvt Ltd	Silver Plot	Thilafushi 01	Carpentry
207	Rasheed Carpentry & Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and Carpentry work
208	The Hawks Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing, vehicle repair, brick work, oil storage, retail business, boat building and café
209	Universal Enterprises Pvt Ltd	Silver Plot	Thilafushi 01	Labor Accommodation
210	Vantha Pvt Ltd	TIZ	TIZ	Warehousing, labor accommodation and boat building and repair
211	Villa Hakatha Pvt Ltd	Platinum Plot	Thilafushi 02	Warehousing
212	Villa Hakatha Pvt Ltd	Gold Plot	Thilafushi 02	All works allowed in Thilafushi
213	Damas Company Pvt Ltd	Silver Plot	Thilafushi 01	All Works allowed in Thilafushi
214	Maziya Service Pvt Ltd	TIZ	TIZ	Warehousing
215	Hassan Jawhary	Silver Plot	Thilafushi 01	Warehousing
216	Damas Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
217	Sirius Enterprises Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
218	Ahmed Lilal			building material storage
219	Sirius Enterprises Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
220	Eye Care Pvt Ltd	TIZ	TIZ	Warehousing, workshop and café

221	Ahmed Sameeru	Silver Plot	Thilafushi 01	Warehousing and Vessels/Vehicle repair
222	Thoha Mohamed	TIZ	TIZ	Warehousing and Carpentry work
223	Abdul Muhsin Hussain	Gold	-	Warehousing
224	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	N/A
225	Marine Coral Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
226	Marine Coral Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
227	Meridium Services Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and oil works
228	Tennssoor Holdings Pvt Ltd	TIZ	TIZ	Warehousing and workshop
229	Wheel Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and workshop
230	Asian Power Investment Pvt Ltd	TIZ	TIZ	Vessel repair and production of machine
231	Mario Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Construction work
232	Haneefa Exzim Investment	Silver Plot	Thilafushi 01	Warehousing
233	Ahmed Sameeru	Silver Plot	Thilafushi 01	Warehousing and Workshop
234	Asir Nizar	Silver Plot	Thilafushi 01	Workshop
235	The Wiz Company Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing
236	Mohamed Yoosuf	TIZ	TIZ	Warehousing and brick works
237	Ali Ahmed	TIZ	TIZ	Warehousing, Café, Shop & Workshop
238	The Hawks Pvt Ltd	Silver Plot	Thilafushi 01	Retail shop, oil supply, brick work, café and boat building
239	Ahmed Luthfee	Silver Plot	Thilafushi 01	Fiber glass speed boat & fishing boat building and boat repair
240	LoneStar Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing, workshop and labor accommodation
241	Maldives Petroleum Link Pvt Ltd	TIZ	TIZ	Warehousing, labor accommodation and maintenances work
242	Mohamed Waheed Hassan	TIZ	TIZ	Warehousing, shop, café and workshop
243	Rayline Services Pvt Ltd	TIZ	TIZ	Warehousing
244	Mario Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Construction work
245	The Hawks Pvt Ltd	Silver Plot	Thilafushi 01	Retail shop, oil supply, brick work, café and boat building
246	Denicon Construction & Trading Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and construction work
247	Ahmed Naseer	TIZ	TIZ	Warehousing
248	Rishtha Company Pvt Ltd	TIZ	TIZ	Warehousing and brick works
249	Tennssoor Holdings Pvt Ltd	TIZ	TIZ	Heavy machinery storage and services
250	Abdulla Abdul Sattar	Silver	Thilafushi 01	Workshop
251	Abdulla Salih	TIZ	TIZ	Warehousing & Workshop
252	Afeef Mohamed	TIZ	TIZ	Labor Accommodation & Café Fiber Glass Work (Allowed through letter)

253	Ahmed Amir	Silver	Thilafushi 01	All Works allowed in Thilafushi
254	Ahmed Mujah	TIZ	TIZ	Warehousing
255	Ali Abdulla	Silver Plot	Thilafushi 01	Workshop
256	Ali Ahmed	TIZ	TIZ	Warehousing, Café, Shop & Workshop
257	Ali Rasheed	Silver Plot	Thilafushi 01	Warehousing
258	Alia Investments Pvt Ltd	TIZ	TIZ	Warehousing and workshop
259	Alia Investments Pvt Ltd	TIZ	TIZ	Warehousing and workshop
260	Alia Investments Pvt Ltd	TIZ	TIZ	Warehousing and workshop
261	Bric Construction	TIZ	TIZ	Workshop and warehouse
262	Coastline Investments Pvt Ltd	Silver Plot	Thilafushi 01	Warehouse
263	Denicon Construction & Trading Pvt Ltd	Silver Plot	Thilafushi 01	Labor Accommodation and shop
264	Dhiraagu	Silver Plot	Thilafushi 01	Mobile antenna
265	Gasim Mahmood	TIZ	TIZ	Workshop
266	Heavy Force Pvt Ltd	Gold Plot	Thilafushi 01	Engineering works
267	Hussain Khalid	TIZ	TIZ	Warehousing & labor accommodation
268	Hussain Nazeeh	Silver Plot	Thilafushi 01	Warehousing
269	Hussain Rasheed	TIZ	TIZ	Warehousing
270	Hussain Shiyam	TIZ	TIZ	Warehousing
271	Hussain Waheed	TIZ	TIZ	Workshop
272	Ibrahim Ali	TIZ	TIZ	Carpentry
273	Jiaz Maldives Pvt Ltd	Silver Plot	TIZ	Warehousing and labor accommodation
274	Meridium Services Pvt Ltd	Silver Plot	Thilafushi 01	Oil works
275	Misraab Trading Co Pvt Ltd	TIZ	TIZ	Warehousing
276	Mohamed Abdul Sattar	Silver Plot	TIZ	Warehousing
277	Mohamed Haleel	Silver Plot	-	Warehousing and workshop
278	Mohamed Musthag	TIZ	TIZ	Warehousing and workshop
279	Mohamed Naasih	-	-	Warehousing
280	Mohamed Rasheed Ahmed	Silver Plot	TIZ	Warehousing, café, workshop and shop
281	Mohamed Rasheed Hussain	TIZ	TIZ	Warehousing, workshop, brick work and machine production
282	Mohamed Shakir	Silver Plot	Thilafushi 01	Vehicle and engine repair
283	Mohamed Shareef	TIZ	TIZ	Metal sheet storage
284	Musthafa Fareed	TIZ	TIZ	Warehousing
285	Naadira Jameel	TIZ	TIZ	Show room and workshop
286	Nasrullah Abdul Waahid	TIZ	TIZ	Warehousing
287	Ocean Logistics Pvt Ltd	TIZ	TIZ	Warehousing of Construction Materials
288	Ooredhoo Maldives Pvt Ltd	Silver Plot	Thilafushi 01	Antenna
289	Pool Chemicals and Services Maldives Pvt Ltd	TIZ	TIZ	Radio station
290	Prestige Group Maldives Pvt Ltd	TIZ	TIZ	Warehousing

291	Relax Maldives Pvt Ltd	TIZ	TIZ	Warehousing, brick work and café
292	Relax Maldives Pvt Ltd	TIZ	TIZ	Warehousing, brick work and café
293	Relax Maldives Pvt Ltd	TIZ	TIZ	Brick work and workshop
294	Riffathulla Ali	TIZ	TIZ	Warehousing, café, workshop and shop
295	Riznee Mohamed	TIZ	TIZ	Warehousing, labor accommodation and hydroponics agriculture
296	Shen Maldives Raufa Construction Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing and labor accommodation
297	Standard and Origin Pvt Ltd	TIZ	TIZ	Warehousing and workshop
298	Standard and Origin Pvt Ltd	TIZ	TIZ	Warehousing and workshop
299	Tennssor Holdings Pvt Ltd	TIZ	TIZ	Heavy machinery storage and services
300	Tennssor Holdings Pvt Ltd	TIZ	TIZ	Heavy machinery storage and services
301	Try On Maldives Pvt Ltd	TIZ	TIZ	Marine engineering workshop
302	Umar Zahir	Silver Plot	Thilafushi 01	Clinic
303	Urban Investment Pvt Ltd	TIZ	TIZ	Warehousing
304	Well Land Investment Pvt Ltd	TIZ	TIZ	Warehousing and making of name board
305	Ahmed Nizar	Silver Plot	Thilafushi 01	Garage
306	B Company Pvt Ltd	TIZ	TIZ	Godown
307	Hussain Musthaq	Silver Plot	Thilafushi 01	Warehousing
308	Sunfront Pvt Ltd	Silver Plot	Thilafushi 01	Warehousing of Construction Materials
309	Wheel Pvt Ltd	Silver Plot	Thilafushi 01	Workshop
310	Equalise Investment Pvt Ltd	TIZ	TIZ	Auto Repair and maintenance services
311	Aboobakuru Jauhary	TIZ	TIZ	Vehicles Paintings and cleaning works
312	Moosa Ali	TIZ	TIZ	metal fabrication
313	Aujaz Hassan	TIZ	TIZ	Workshop and brick work
314	Department of Public Health	Silver Plot	Thilafushi 01	Warehousing
315	Department of Public Health	Silver Plot	Thilafushi 01	Warehousing
316	State Electric Company Ltd	Silver Plot	Thilafushi 02	Electricity sevices to Thilafushi
317	State Electric Company Ltd	Silver Plot	Thilafushi 02	Electricity sevices to Thilafushi
318	State Electric Company Ltd	Silver Plot	Thilafushi 02	Electricity sevices to Thilafushi
319	State Electric Company Ltd	Silver Plot	Thilafushi 02	Electricity sevices to Thilafushi
320	Greater Male' Industrial Zone Limited		Thilafushi	Overall administration and management of Thilafushi and Gulhifalhu

APPENDIX B: Maps of Thilafushi and Gulhifalhu with the surveyed individuals and companies located

INDIVIDUALS LOCATIONS



COMPANIES LOCATIONS



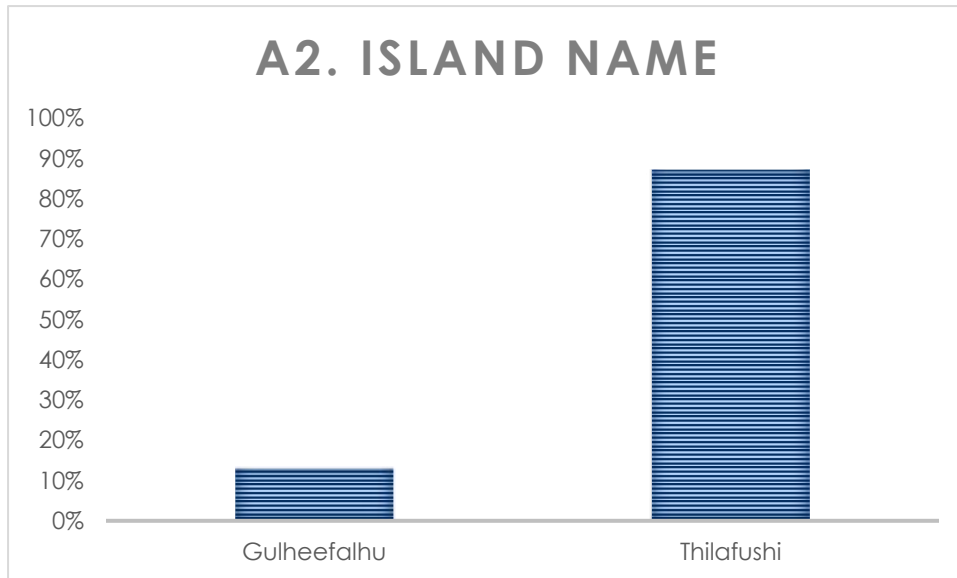
APPENDIX C: Questionnaires for Individual and Company Surveys

(Attached as a separate file)

APPENDIX D: Graphical representation of data obtained from individual survey

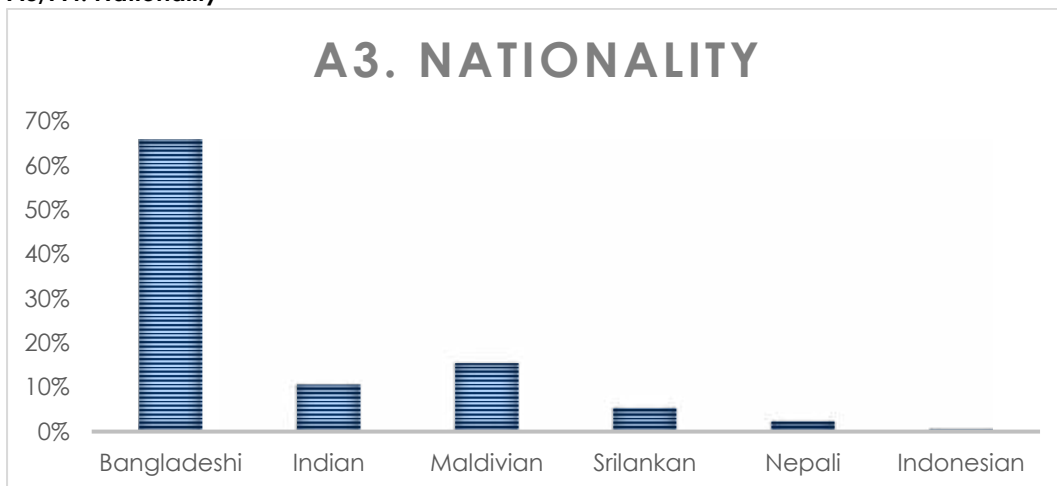
A. GENERAL INFORMATION: RESPONDENT

A2. Island Name



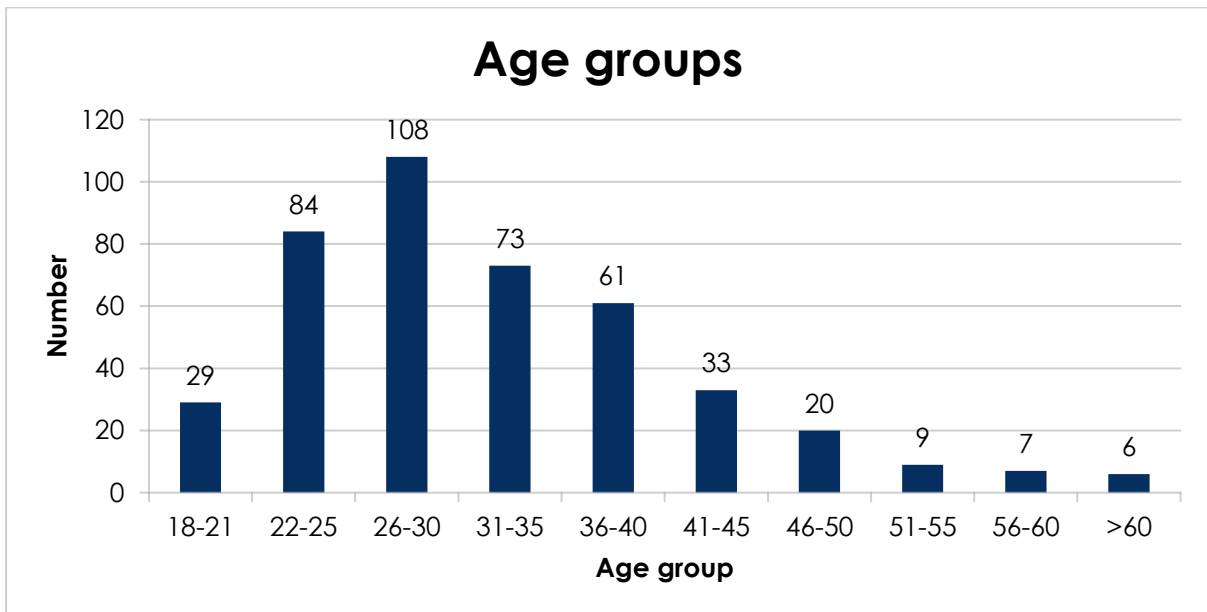
Gulheefalhu	56	13%
Thilafushi	378	87%

A3/A4. Nationality



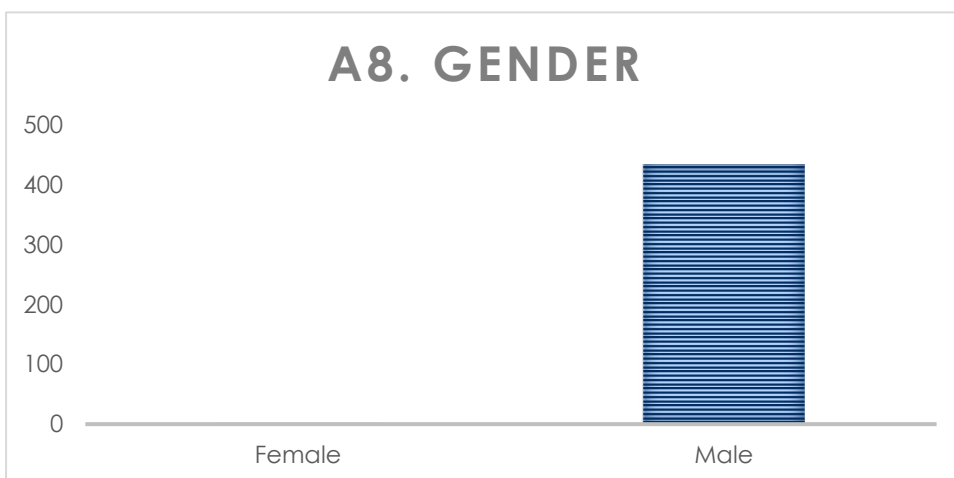
Bangladeshi	286	66%
Indian	46	11%
Maldivian	67	15%
Srilankan	23	5%
Nepali	10	2%
Indonesian	2	0%

A7. Age group



Age group	Count
18-21	29
22-25	84
26-30	108
31-35	73
36-40	61
41-45	33
46-50	20
51-55	9
56-60	7
>60	6
	430

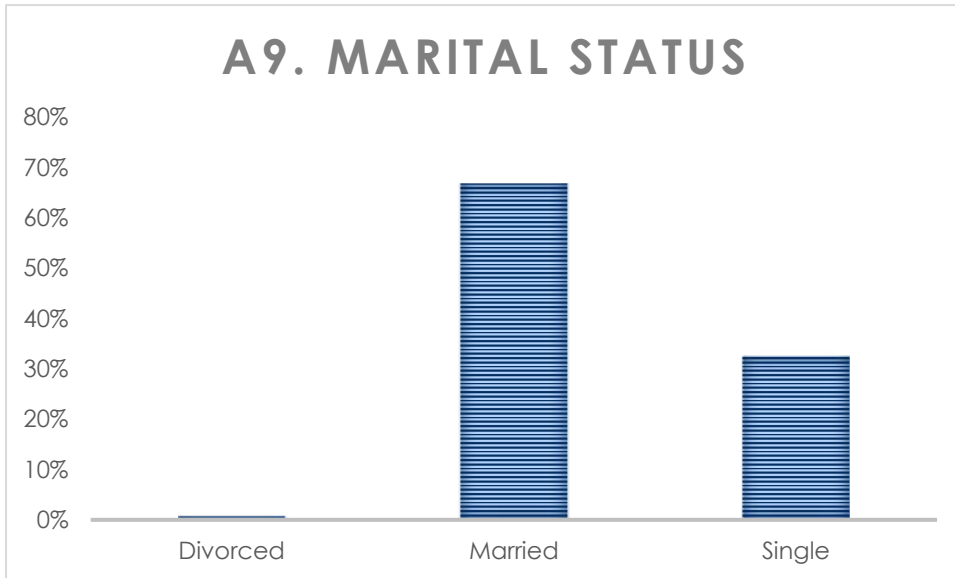
A8. Gender



Female	1
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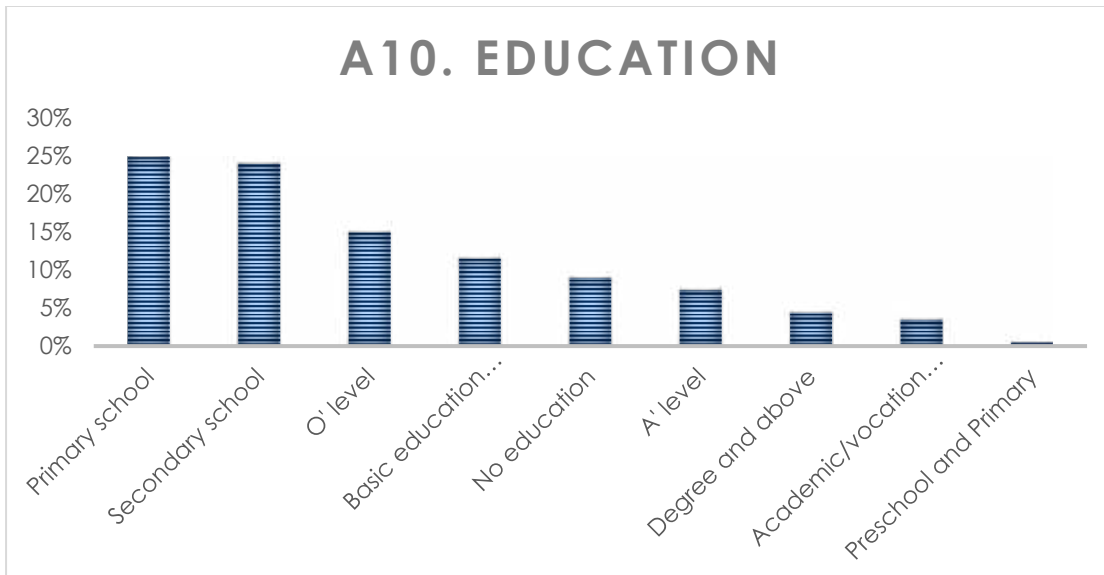
Male	429
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A9. Marital Status



Divorced	3	1%
Married	290	67%
Single	141	32%

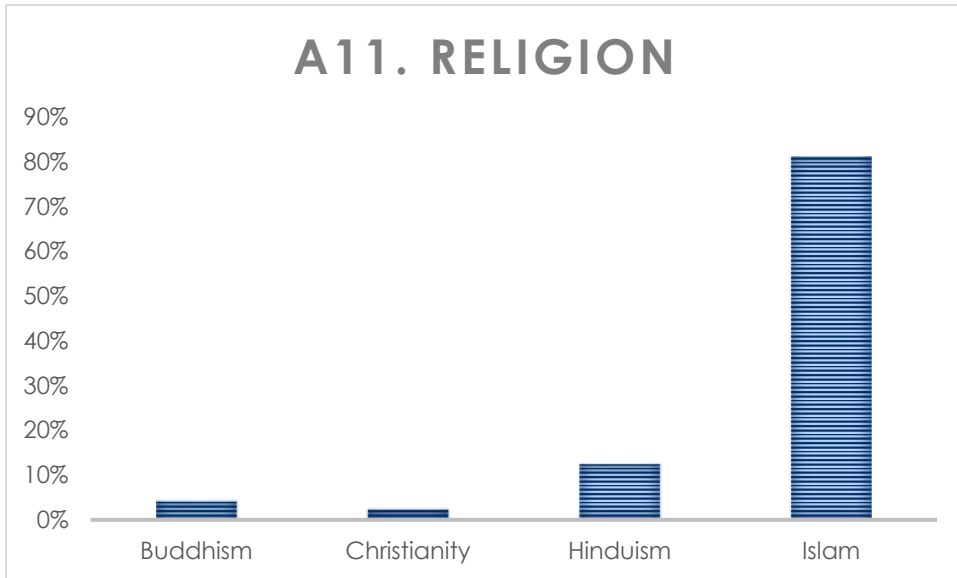
A10. Education



Primary school	108	25%
Secondary school	104	24%
O' level	65	15%
Basic education (basic literacy)	50	12%
No education	39	9%
A' level	32	7%

Degree and above	19	4%
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A11/A12. Religion



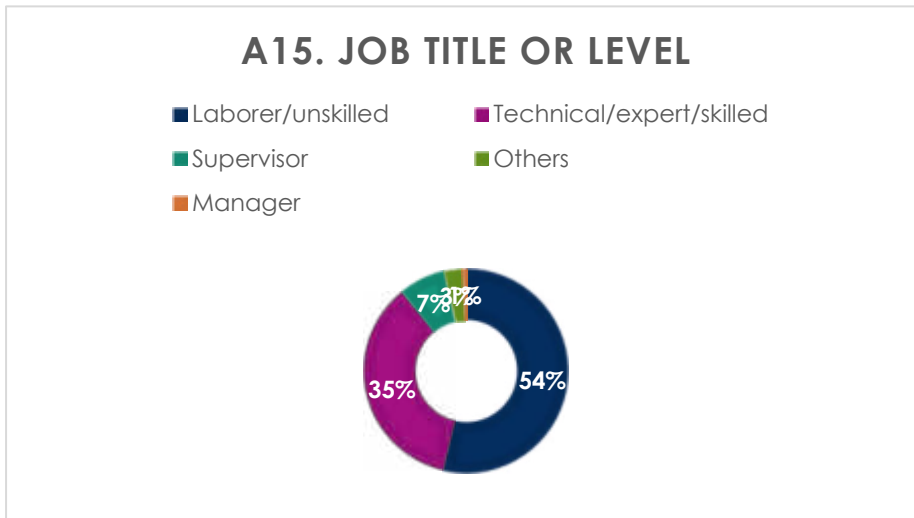
Buddhism	18	4%
Christianity	10	2%
Hinduism	54	12%
Islam	352	81%

A13/A14. Main Language used to communicate



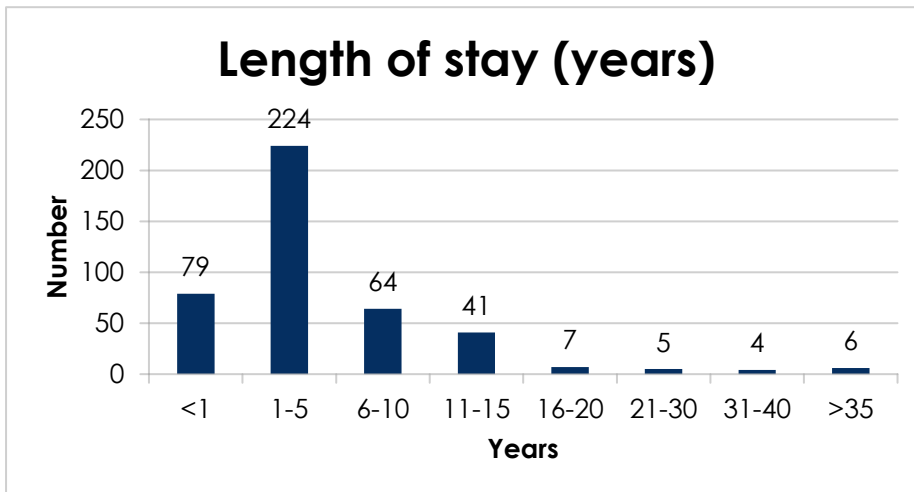
Bengali	239	55%
Dhivehi	127	29%
Hindhi	22	5%
Tamil	15	3%
English	13	3%
Nepali	9	2%
Sinhala	7	2%
Malayalam	1	0%

A15. Job Title/ or Level



Laborer/unskilled	233	54%
Technical/expert/skilled	154	35%
Supervisor	32	7%
Others	12	3%
Manager	3	1%

A16. Length of Stay



Length of stay (years)	Count
<1	79
1-5	224
6-10	64
11-15	41
16-20	7
21-30	5
31-40	4