TEST REPORT

Technical Report **(6817)268-0138** October 19, 2017

Date Received September 24, 2017

Factory Company Name: **Factory I; BANLADESH**
Factory Address: Dhaka Region, BANGLADESH
Project No.:
Client Reference No.:
Sample Type: I001) Incoming water – Grab
I002) Raw Wastewater – 6 hours Time – weighted Composite
I003) Discharged Wastewater – 6 hours Time – weighted Composite
Sample Pick Up Date: September 24, 2017
Wastewater Discharge to: Factory Owned ETP
On-Site Effluent Treatment Plant (ETP): Yes
Discharge Type: Direct Discharge
Test Period: September 25, 2017 To October 19, 2017

Sample Description:

I001) Incoming water
I002) Raw Wastewater
I003) Discharged Wastewater

REMARK

If there are questions or concerns on this report, please contact the following persons:

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This report shown the test result of the auxiliary chemical and/or raw material samples, which collected during particular factory audit. The results of this report shall not be used for any regulatory compliance purposes.

* The sampling is agreed with client.

BUREAU VERITAS
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Photo of the Sample/ Sampling Location

I001) Incoming water

I002) Raw Wastewater

I003) Discharged Wastewater

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Executive Summary

1A) Conventional Parameters	I001	I002	I003
Temperature	N/A	N/A	See result in page 05-08
TSS			
COD			
Total-N			
pH Value			
Color [m^{-1}] (436nm; 525nm; 620nm)			
BOD_5			
Ammonium-N			
Total-P			
AOX			
Oil and Grease			
Phenol			
Coliform			
Foam			
ANIONS - Sulfide			
ANIONS - Sulfite			
1B) Conventional Parameters –METALS	•	•	•

ZDHC MRSL Substances	I001	I002	I003
2A) APs and APEOs	NT	o	o
2B) Chlorobenzenes and Chlorotoluenes	NT	o	o
2C) Chlorophenols	NT	o	o
2D) Azo Dyes	NT	o	o
2E) Carcinogenic Dyes	NT	o	o
2F) Disperse Dyes	NT	o	o
2G) Flame Retardants	NT	o	o
2H) Glycols	NT	o	o
2I) Halogenated Solvents	NT	o	o
2J) Organotin Compounds	o	•	o
2K) Perfluorinated and Polyfluorinated Chemicals	NT	o	o
2L) Phthalates	NT	o	o
2M) Poly Aromatic Hydrocarbons	NT	o	o
2N) Volatile Organic Compounds	NT	o	o

Note / Key :

- • – Detected
- o – Not Detected
- NT – Not Tested

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Objective

The environment samples were tested for below parameters.

1A) Conventional Parameters
1B) Conventional Parameters – METALS
2A) APs and APEOs
2B) Chlorobenzenes and Chlorotoluenes
2C) Chlorophenols
2D) Azo Dyes
2E) Carcinogenic Dyes
2F) Disperse Dyes
2G) Flame Retardants
2H) Glycols
2I) Halogenated Solvents
2J) Organotin Compounds
2K) Perfluorinated and Polyfluorinated Chemicals
2L) Phthalates
2M) Poly Aromatic Hydrocarbons
2N) Volatile Organic Compounds

Sampling Plan

Basically, three environment samples were sampled per factory, including 1) Incoming water; 2) Raw Wastewater and 3) Discharged Wastewater. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is time-weighted composite samples (agreed with client.). Composite sampling shall be performed for no less than six hours, with no more than one hour between discrete samples. Each discrete sample shall be of equal volume. Wastewater and freshwater samples should, as much as possible, be collected simultaneously, during the time that PU is in normal operation. The sampling shall aim to analyse the snapshot of water quality characteristics of the operating PU. Under no circumstance shall samples be taken during times when the production process is not running or the wastewater is diluted due to heavy rainfall, etc.

Remark :

- Sampling procedure is with reference to below standards:
  1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
  2) Australia EPA (Victoria) Guideline (June 2009), Sampling and Analysis of Waters, Wastewaters, Soils and Wastes.
  3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
  4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.
- Field data records are attached in Appendix B.

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Test Result

1A) Conventional Parameters

Temperature

Test Method : Measurement by thermometer

Tested Item(s)	Result	Unit	Conclusion
I003	36.1 (Exceed Foundational Limit)	deg. C	DATA

Note:

deg. C = degree Celsius (°C)
Foundational Limit: ▲15 / max. 35°C; Progressive Limit: ▲10 / max. 30°C; Aspirational Limit: ▲5 / max. 25°C

Total Suspended Solids (TSS)

Test Method : Reference to APHA 22nd Edition-2540D & ALPA 2540D

Tested Item(s)	Result	Unit	Conclusion
I003	22 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 50 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Chemical Oxygen Demand (COD)

Test Method : Reference to ALPA 5220B & EPA 410.3

Tested Item(s)	Result	Unit	Conclusion
I003	60 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 150 mg/L; Progressive Limit: 80 mg/L; Aspirational Limit: 40 mg/L

Total Nitrogen (Total-N)

Test Method : Reference to APHA 22nd Edition 2012, 4500 N Org.B

Tested Item(s)	Result	Unit	Conclusion
I003	6.7 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
BLQ = Below Limit of Quantification LOQ = Limit of Quantification
Foundational Limit: 20 mg/L; Progressive Limit: 10 mg/L; Aspirational Limit: 5 mg/L

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pH Value

Test Method : Reference to ALPA 4500-H+B & EPA150.2

-	Unit	Result
Test Item(s)	-	I003
Parameter	-	-
Temp. of sample	deg. C	24
pH value of sample	-	7.9
Conclusion	-	DATA

Note:

Temp. = Temperature deg. C = degree Celsius (°C)
Limit: 6 - 9

Color [m^{-1}] (436nm; 525nm; 620nm)

Test Method : ISO 7887: 2011(E), B

Tested Item(s)	Parameter	pH	Result	Unit	Conclusion
I003	Trial (λ=436 nm)	7.7	0.3 (Aspirational)	m^{-1}	DATA
	Trial (λ=525 nm)	7.7	0.1 (Aspirational)	m^{-1}	DATA
	Trial (λ=620 nm)	7.7	0.1 (Aspirational)	m^{-1}	DATA

Note:
Foundational Limit: 7;5;3 m^{-1}; Progressive Limit: 5;3;2 m^{-1}; Aspirational Limit: 2;1;1 m^{-1}

Biochemical Oxygen Demand (BOD_5)

Test Method : Reference to APHA 22nd Edition-5210B & ALPA 5210B

Tested Item(s)	Result	Unit	Conclusion
I003	18 (Foundational)	mg/L	DATA

Note:
mg/L = milligram per liter
Foundational Limit: 30 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Ammonia Nitrogen

Test Method : Reference to APHA 22nd Edition 2012, 4500 NH_3 B.C

Tested Item(s)	Result	Unit	Conclusion
I003	1.9 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
BLQ = Below Limit of Quantification LOQ = Limit of Quantification
Foundational Limit: 10 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.5 mg/L

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Total Phosphorus (Total-P)

Test Method : Reference to APHA 22nd Edition -4500-P.E (2012)

Tested Item(s)	Result	Unit	Conclusion
I003	0.8239 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 3 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.1 mg/L

Adsorbable Organic Halogen (AOX)

Test Method : Reference to HJ/T 83

Tested Item(s)	Result	Unit	Conclusion
I003	0.600 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 5 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.1 mg/L

Oil and Grease

Test Method : Reference to APHA 22nd Edition -5520 B (2012)

Tested Item(s)	Result	Unit	Conclusion
I003	9 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 10 mg/L; Progressive Limit: 2 mg/L; Aspirational Limit: 0.5 mg/L

Phenol

Test Method : Reference to APHA 22nd Edition 2012, USEPA 420.1

Tested Item(s)	Result	Unit	Conclusion
I003	BLQ (LOQ. 0.01) (Progressive)	mg/L	DATA

Note:
mg/L = milligram per liter
BLQ = Below Limit of Quantification LOQ = Limit of Quantification
Foundational Limit: 0.5 mg/L; Progressive Limit: 0.01 mg/L; Aspirational Limit: 0.001 mg/L

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Coliform

Test Method : Reference to APHA 22nd Edition 2012, 9215 B

Tested Item(s)	Result	Unit	Conclusion
I003	32 (Progressive)	MPN / 100 mL	DATA

Note:

bacteria/100 mL = bacteria per 100 milliliters
Foundational Limit: 400 / 100 ml; Progressive Limit: 100 / 100 ml; Aspirational Limit: 25 / 100 ml;

Foam

Test Method : Visual

Tested Item(s)	Result	Unit	Conclusion
I003	No Foam	-	DATA

ANIONS - Sulfide

Test Method : Reference to APHA 22nd Edition 2012, IS: 3025 Part 29

Tested Item(s)	Result	Unit	Conclusion
I003	BLQ (LOQ 1.0) (Exceed Foundational Limit)	mg/L	DATA

Note:
mg/L = milligram per liter
BLQ = Below Limit of Quantification LOQ = Limit of Quantification
Foundational Limit: 0.5 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L

ANIONS - Sulfite

Test Method : Reference to APHA 22nd Edition 2012, 4500 SO_3 B

Tested Item(s)	Result	Unit	Conclusion
I003	BLQ (LOQ 1.0) (Foundational)	mg/L	DATA

Note:
mg/L = milligram per liter
BLQ = Below Limit of Quantification LOQ = Limit of Quantification
Foundational Limit: 2 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.2 mg/L

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1B) Conventional Parameters – METALS

Heavy Metals	**I001** *(µg/L)*	**I002** *(µg/L)*	**I003** *(µg/L)*
Antimony(Sb) *Foundational Limit: 100 µg/L;* *Progressive Limit: 50 µg/L;* *Aspirational Limit: 10 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Chromium(Cr), total *Foundational Limit: 200 µg/L;* *Progressive Limit: 100 µg/L;* *Aspirational Limit: 50 µg/L*	ND (Aspirational)	12 (Aspirational)	3 (Aspirational)
Cobalt(Co) *Foundational Limit:50 µg/L;* *Progressive Limit: 20 µg/L;* *Aspirational Limit: 10 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Copper(Cu) *Foundational Limit: 1000 µg/L;* *Progressive Limit: 500 µg/L;* *Aspirational Limit: 250 µg/L*	ND (Aspirational)	38 (Aspirational)	35 (Aspirational)
Nickel (Ni) *Foundational Limit:.200 µg/L;* *Progressive Limit: 100 µg/L;* *Aspirational Limit: 50 µg/L*	ND (Aspirational)	10 (Aspirational)	11 (Aspirational)
Silver (Ag) *Foundational Limit: 100 µg/L;* *Progressive Limit: 50 µg/L;* *Aspirational Limit: 5 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Zinc(Zn) *Foundational Limit: 5000 µg/L;* *Progressive Limit: 1000 µg/L;* *Aspirational Limit: 500 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Arsenic (As) *Foundational Limit: 50 µg/L;* *Progressive Limit: 10 µg/L;* *Aspirational Limit: 5 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Cadmium(Cd) *Foundational Limit: 100 µg/L;* *Progressive Limit: 50 µg/L;* *Aspirational Limit: 10 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Lead(Pb) *Foundational Limit:100 µg/L;* *Progressive Limit: 50 µg/L;* *Aspirational Limit: 10 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Mercury (Hg) *Foundational Limit: 10 µg/L;* *Progressive Limit: 5 µg/L;* *Aspirational Limit :1 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Chromium VI(CrVI) *Foundational Limit: 50 µg/L;* *Progressive Limit: 5 µg/L;* *Aspirational Limit: 1 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Cyanide(CN-) *Foundational Limit: 200 µg/L;* *Progressive Limit: 100 µg/L;* *Aspirational Limit: 50 µg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Manganese (Mn)	306	1150	708

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2J) Organotin Compounds

Organotin Compounds	**I001** *(μg/L)*	**I002** *(μg/L)*	**I003** *(μg/L)*
Monobutyltin (MBT)	ND	0.76	ND
Dibutyltin (DBT)	ND	ND	ND
Dioctyltin (DOT)	ND	ND	ND
Tributyltin (TBT)	ND	ND	ND
Triphenyltin (TPhT)	ND	ND	ND
Tricyclohexyltin (TCyT)	ND	ND	ND
Trioctyltin (TOT)	ND	ND	ND
Tripropyltin (TPT)	ND	ND	ND
Monooctyltin (MOT)	ND	ND	ND
Diphenyltin (DPhT)	ND	ND	ND
Tetrabutyltin (TeBT)	ND	ND	ND
Mono-, di- and tri-methyltin derivatives	ND	ND	ND
Mono-, di- and tri-butyltin derivatives	ND	ND	ND
Mono-, di- and tri-phenyltin derivatives	ND	ND	ND
Mono-, di- and tri-octyltin derivatives	ND	ND	ND

Others Priority Chemical Groups

	I001 *(μg/L)*	**I002** *(μg/L)*	**I003** *(μg/L)*
2A) APs and APEOs	NT	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	NT	ND	ND
2C) Chlorophenols	NT	ND	ND
2D) Azo Dyes	NT	ND	ND
2E) Carcinogenic Dyes	NT	ND	ND
2F) Disperse Dyes	NT	ND	ND
2G) Flame Retardants	NT	ND	ND
2H) Glycols	NT	ND	ND
2I) Halogenated Solvents	NT	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	NT	ND	ND
2L) Phthalates	NT	ND	ND
2M) Poly Aromatic Hydrocarbons	NT	ND	ND
2N) Volatile Organic Compounds	NT	ND	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in tables of Appendix A.
- ND = Not detected (Please refer to reporting limit shown in Appendix A.).
- All results are in ppb as unit.
- ppm = part(s) per million; ppb = part(s) per billion.
- NT=Not Tested.

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APPENDIX A

Parameters, limits and testing method aligned with the ZDHC Wastewater Guidelines

Group	Substance (analytes)	CAS No.	Detection Limit (µg/L)	Testing method
2A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Octylphenol OP, mixed isomers	Various (incl. 140-66-9, 1806-26-4, 27193-28-8)	5	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC/MS or LC/MS(-MS) OPEO/NPEO (n>2): ISO 18254-1 OPEO/NPEO: ISO18857-2 or ASTM D7065(LC/MS; GC/MS or LC/MSMS for n=1,2)
	Nonylphenol NP	Various (incl. 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3)		
	Nonylphenol Ethoxylates OPEO (2-16)	Various (incl. 9002-93-1, 9036-19-5, 68987-90-6)		
	Nonylphenol Ethoxylates NPEO (2-18)	Various (inc. 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0)		
2B. Chlorobenzenes and Chlorotoluenes	Chlorobenzene	108-90-7	0.2	USEPA 8260B,8270D. Dichloromethane extraction followed by GC/MS
	1,2-Dichlorobenzene	95-50-1		
	1,3-Dichlorobenzene	541-73-1		
	1,4-Dichlorobenzene	106-46-7		
	1,2,3-Trichlorobenzene	87-61-6		
	1,2,4-Trichlorobenzene	120-82-1		
	1,3,5-Trichlorobenzene	108-70-3		
	1,2,3,4-Tetrachlorobenzene	634-66-2		
	1,2,3,5-Tetraclorobenzene	634-90-2		
	1,2,4,5-Tetrachlorobenzene	95-94-3		
	Pentachlorobenzene	608-93-5		
	Hexachlorobenzene	118-74-1		
	2-Chlorotoluene	95-49-8		
	3-Chlorotoluene	108-41-8		
	4-Chlorotoluene	106-43-4		
	2,3-Dichlorotoluene	32768-54-0		
	2,4-Dichlorotoluene	95-73-8		
	2,5-Dichlorotoluene	19398-61-9		
	2,6-Dichlorotoluene	118-69-4		
	3,4-Dichlorotoluene	95-75-0		
	2,3,6-Trichlorotoluene	2077-46-5		
	2,4,5-Trichlorotoluene	6639-30-1		
	Alpha,2,4-Trichlorotoluene	94-99-5		
	Alpha,2,6-Trichlorotoluene	2014-83-7		
	Alpha,3,4-Trichlorotoluene	102-47-6		
	Alpha, alpha,2,6-tetrachlorotoluene	81-19-6		
	Alpha, alpha, alpha, 2-,6-tetrachlorotoluene	2136-89-2		
	Alpha, alpha,alpha, 4-tetrachlorotoluene	5216-25-1		
	Pentachlorotoluene	877-11-2		
2C. Chlorophenols	Pentachlorophenol (PCP)	87-86-5	0.5	USEPA 8270 D Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC/MS
	2,3,4,5-Tetrachlorophenol	4901-51-3		
	2,3,4,6-Tetrachlorophenol	58-90-2		
	2,3,5,6-Tetrachlorophenol	935-95-5		
	2,4,6-Trichlorophenol	88-06-2		

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Group	Substance (analytes)	CAS No.	Detection Limit (µg/L)	Testing method
	2,3,5-Trichlorophenol	933-78-8		ISO 14154:2005
	2,4,5-Trichlorophenol	95-95-4		
	3,4,5-Trichlorophenol	609-19-8		
	2,3,4-Trichlorophenol	15950-66-0		
	2,3,6-Trichlorophenol	933-75-5		
	2,3-Dichlorophenol	576-24-9		
	3,4-Dichlorophenol	95-77-2		
	2,4-Dichlorophenol	120-83-2		
	2,5-Dichlorophenol	583-78-8		
	2,6-Dichlorophenol	87-65-0		
	3,5-Dichlorophenol	591-35-5		
	2-Chlorophenol	95-57-8		
	3-Chlorophenol	108-43-0		
	4-Chlorophenol	106-48-9		
2D. Dyes - Azo (Forming Restricted Amines)	4-Aminodiphenyl	92-67-1	0.1	EN 14362-1 EN 14362-3 Reduction step with Sodiumdithionite, solvent extraction, GC/MS or LC/MS
	Benzidine	92-87-5		
	4-Chloro-o-toluidine	95-69-2		
	2-Naphthylamine	91-59-8		
	o-Aminoazotoluene	97-56-3		
	5-nitro-o-toluidine	99-55-8		
	4-Chloroaniline	106-47-8		
	4-Methoxy-m-phenylenediamine	615-05-4		
	4,4'-methylenedianiline	101-77-9		
	3,3`-Dichlorobenzidine	91-94-1		
	3,3`-Dimethoxybenzidine	119-90-4		
	3,3`-Dimethylbenzidine	119-93-7		
	4,4`-Methylene-di-o-toluidine	838-88-0		
	6-methoxy-m-toluidine (p-Cresidine)	120-71-8		
	4,4`-Methylene-bis-(2-chloro-aniline)	101-14-4		
	4,4`-Oxydianiline	101-80-4		
	4,4`-Thiodianiline	139-65-1		
	o-Toluidine	95-53-4		
	4-Methyl-m-phenylenediamine	95-80-7		
	2,4,5-Trimethylaniline	137-17-7		
	o-Anisidine	90-04-0		
	4-Aminoazobenzene	60-09-3		
	2,4-Xylidine	95-68-1		
	2,6-Xylidine	87-62-7		
2E. Dyes-Carcionogenic or Equivalent Concern	C.I. Direct Black 38	1937-37-7	500	Liquid Extraction LC/MS
	C.I. Direct Blue 6	2602-46-2		
	C.I. Acid Red 26	3761-53-3		
	C.I. Basic Red 9	569-61-9		
	C.I. Direct Red 28	573-58-0		
	C.I. Basic Violet 14	632-99-5		
	C.I. Disperse Blue 1	2475-45-8		
	C.I. Disperse Blue 3	2475-46-9		
	C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5		
	C.I. Basic Green 4 (malachite green chloride)	569-64-2		
	C.I. Basic Green 4 (malachite green oxalate)	2437-29-8		
	C.I. Basic Green 4(malachite	10309-95-2		

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Group	Substance (analytes)	CAS No.	Detection Limit (µg/L)	Testing method
	green)			
	Disperse Orange 11	82-28-0		
2F. Dyes-disperse (sensitizing)	Disperse Yellow 1	119-15-3	50	Liquid Extraction LC/MS
	Disperse Blue 102	12222-97-8		
	Disperse Blue 106	12223-01-7		
	Disperse Yellow 39	12236-29-2		
	Disperse Orange 37/59/76	13301-61-6		
	Disperse Brown 1	23355-64-8		
	Disperse Orange 1	2581-69-3		
	Disperse Yellow 3	2832-40-8		
	Disperse Red 11	2872-48-2		
	Disperse Red 1	2872-52-8		
	Disperse Red 17	3179-89-3		
	Disperse Blue 7	3179-90-6		
	Disperse Blue 26	3860-63-7		
	Disperse Yellow 49	54824-37-2		
	Disperse Blue 35	12222-75-2		
	Disperse Blue 124	61951-51-7		
	Disperse Yellow 9	6373-73-5		
	Disperse Orange 3	730-40-5		
	Disperse Blue 35	56524-77-7		
2G. Flame Retardants	Polybromobiphenyls (PBBs)	59536-65-1	5	USEPA 8270 ISO 22032, USEPA 527 and USEPA 8321B. Dichloromethane extraction GC/MS or LC/MS(-MS)
	Pentabromodiphenyl ether (PentaBDE)	32534-81-9		
	Octabromodiphenyl ether (OctaBDE)	32536-52-0		
	Decabromodiphenyl ether (DecaBDE)	1163-19-5		
	Tris(2,3-dibromopropyl) phosphate (TRIS/TDBPP)	126-72-7		
	Tetrabromobisphenol A (TBBPA)	79-94-7		
	Bis(2,3-dibromopropyl) phosphate (BIS/BDBPP)	5412-25-9		
	Hexabromocyclododecane (HBCDD)	3194-55-6		
	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0		
	Tris(aziridinyl)-phosphineoxide (TEPA)	545-55-1		
	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8		
	Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8		
	Short chain chlorinated paraffins (SCCPs) (C10-C13)	85535-84-8		
2H. Glycols	Bis(2-methoxyethyl)-ether	111-96-6	50	US EPA 8270 Liquid Extraction LC/MS GC-MS
	2-ethoxyethanol	110-80-5		
	2-ethoxyethyl acetate	111-15-9		
	Ethylene glycol dimethyl ether	110-71-4		
	2-methoxyethanol	109-86-4		
	2-methoxyethylacetate	110-49-6		
	2-methoxypropylacetate	70657-70-4		
	Triethylene glycol dimethyl ether	112-49-2		
2I. Halogenated	1,2-Dichloroethane	107-06-2	1	USEPA 8260B

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Group	Substance (analytes)	CAS No.	Detection Limit (µg/L)	Testing method
Solvents	Methylene Chloride	75-09-2		Headspace GC/MS or Purge-and-Trap-GC/MS
	Trichloroethylene	79-01-6		
	Tetrachloroethylene	127-18-4		
2J. Organotin Compounds	Mono-, di- and tri-methyltin derivatives	Various	0.01	ISO 17353 Derivatisation with NaB(C2H5) GC/MS
	Mono-, di- and tri-butyltin derivatives	Various		
	Mono-, di- and tri-phenyltin derivatives	Various		
	Mono-, di- and tri-octyltin derivatives	Various		
2K. Perfluorinated and Polyfluorinated Chemicals (PFCs)	Perfluoro-n-octanoic acid (PFOA)	335-67-1	0.01	DIN 38407-42 (modified) Ionic PFC: Concentration or direct injection, LC/MS(-MS); Non-ionic PFC (FTOH): derivatisation with acetic anhydride, followed by GC/MS
	Perfluorobutanesulfonic acid (PFBS)	29420-49-3, 29420-43-3		
	Perfluorooctanesulfonic acid (PFOS)	355-46-4 ,432-50-7		
	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4		
	8:2 FTOH	678-39-7	1	
	6:2 FTOH	647-42-7		
2L. Phthalates (including all other esthers of phthalic acid)	Butyl benzyl phthalate (BBP)	85-68-7	10	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
	Dibutyl phthalate (DBP)	84-74-2		
	Di-2-ethylhexyl phthalate (DEHP)	117-81-7		
	Di-n-octyl phthalate (DNOP)	117-84-0		
	Di-iso-nonyl phthalate (DINP)	28553-12-0		
	Di-iso-decyl phthalate (DIDP)	26761-40-0		
	Diethyl phthalate (DEP)	84-66-2		
	Di-n-propyl phthalate (DPRP)	131-16-8		
	Di-iso-butyl phthalate (DIBP)	84-69-5		
	Di-cyclohexyl phthalate (DCHP)	84-61-7		
	Di-n-hexyl phthalate (DnHP)	84-75-3		
	Dinonyl phthalate (DNP)	84-76-4		
	Di-iso-octyl phthalate (DIOP)	27554-26-3		
	Dimethoxyethyl phthalate (DMEP)	117-82-8		
	1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4		
	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6		
2M. Poly Aromatic Hydrocarbons (PaHs)	Benzo[a]pyrene (BaP)	50-32-8	1	US EPA 8270 DIN 38407-39 Solvent extraction GC/MS
	Anthracene	120-12-7		
	Pyrene	129-00-0		
	Benzo[ghi]perylene	191-24-2		
	Benzo[e]pyrene	192-97-2		
	Indeno[1,2,3-cd]pyrene	193-39-5		
	Benzo[j]fluoranthene	205-82-3		
	Benzo[b]fluoranthene	205-99-2		
	Fluoranthene	206-44-0		
	Benzo[k]fluoranthene	207-08-9		
	Acenaphthylene	208-96-8		
	Chrysene	218-01-9		
	Dibenz[a,h]anthracene	53-70-3		

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Group	Substance (analytes)	CAS No.	Detection Limit (µg/L)	Testing method
	Benzo[a]anthracene	56-55-3		
	Acenaphthene	83-32-9		
	Phenanthrene	85-01-8		
	Fluorene	86-73-7		
	Naphthalene	91-20-3		
2N. Volatile Organic Compound (VOCs)	Benzene	71-43-2	1	ISO 11423-1 Headspace- or Purge-and-Trap-GC/MS US EPA 8260
	Xylene	1330-20-7		
	o-cresol	95-48-7		
	p-cresol	106-44-5		
	m-cresol	108-39-4		

Group	Parameter/substance	CAS No.	Limits (mg/L) or otherwise specified			Testing method
			A	P	F	
1A. Conventional Parameters (sum parameters)	Temperature	–	▲5/ max. 25°C	▲10/ max. 30°C	▲15/ max. 35°C	Apply the standard methods that best apply to the region (ISO, EU, US, China), please refer to ZDHC Wastewater Guidelines for more details on the testing method
	TSS	–	5	15	50	
	COD	–	40	80	150	
	Total-N	–	5	10	20	
	pH	–	6 - 9			
	Color [m-1] (436nm; 526nm; 620nm)	–	2;1;1	5;3;2	7;5;3	
	BOD5	–	5	15	30	
	Ammonium-N	–	0.5	1	10	
	Total-P	–	0.1	0.5	3	
	AoX	–	0.1	1	5	
	Oil and Grease	–	0.5	2	10	
	Phenol	–	0.001	0.01	0.5	
	Coliform(bacteria/100ml)	–	25/100 ml	100/100 ml	400/100 ml	
	Persistent Foam	–	No foam/ Dissipating/ Persistent			
	ANIONS					
	Sulfide	–	0.01	0.05	0.5	
	Sulfite	–	0.2	0.5	2	

Group	Parameter/substance	CAS No.	Detection Limit (µg/L)/ (ppb)	Limits (µg/L)			Testing method
				A	P	F	
1B. Conventional Parameters - **METALS**	Cadmium(Cd)	7440-43-9	0.1	10	50	100	Apply the standard methods that best apply to the region (ISO, EU, US, China), please refer to ZDHC Wastewater Guidelines for more details on the testing method
	Lead(Pb)	7439-92-1	1	10	50	100	
	Mercury (Hg)	7439-97-6	0.05	1	5	10	
	Silver (Ag)	7440-22-4	1	5	50	100	
	Cobalt(Co)	7440-48-4	1	10	20	50	
	Nickel (Ni)	7440-02-0	1	50	100	200	
	Antimony(Sb)	7440-36-0	1	10	50	100	
	Arsenic (As)	7440-38-2	1	5	10	50	
	Copper(Cu)	7440-50-8	1	250	500	1000	
	Zinc(Zn)	7440-66-6	1	500	1000	5000	
	Chromium(Cr), total	7440-47-3	1	50	100	200	
	Manganese(Mn)	7439-96-5	1	-	-	-	
	Chromium VI(CrVI)	18540-29-9	1	1	5	50	
	Cyanide(CN-)	Various (incl. 57-12-5)	20	50	100	200	

A: Aspirational P: Progressive F: Foundational

Note / Key :

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ppm = part(s) per million; ppb = part(s) per billion
U. S. EPA = United States Environmental Protection Agency
APHA = American Public Health Association

Comment 1: The report [(6817)268-0138] is sub-contracted to BVCPS (Shanghai, China) For Perfluorinated Chemicals, Flame Retardants, Halogenated Solvents, Glycols, VOC & AOX Test.

Comment 2: The report [(6817)268-0138] is sub-contracted to BVCPS (Chennai, India) For Phenol, Ammonium-N, Total-N, ANIONS – Sulfide, ANIONS – Sulfite & Coliform Test.

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TEST REPORT

CLIENT DETAILS

Client Name:	**Factory II; BANLADESH**
Client Contact:	Dhaka Region, BANGLADESH
Telephone:	
Email:	
Address:	

LABORATORY DETAILS

SGS Affiliate and Laboratory	SGS Bangladesh Limited
SGS Contact:	Rafiqul Islam, Chemical Lab Manager
Telephone:	+88029676500 Ext-220
Email:	rafiqul.islam@sgs.com
Address:	Noor Tower, 110 Bir Uttam C.R Datta Road, Dhaka-1205, Bangladesh

FACTORY DETAILS

Factory Name:	**Factory II; BANLADESH**
Factory Contact:	Dhaka Region, BANGLADESH
Telephone:	
Email:	
Address:	
Discharge Destination	

SAMPLE AND TESTING DETAILS

Sampling Affiliate:	SGS Bangladesh Limited
Sampling Engineer:	Mr. Md. Manir Hossain
Date of Sample Collection	12/10/2017
No. of Samples:	Water (1); Sludge (1)
Sample Description:	1) Discharge Wastewater(6- hour composite) 2) Sludge(Grab)
Sampling Method:	1) 6-hour Composite 2) Grab
Sample Volume	26L water in total; 3 kg sludge in total
Testing Affiliate:	SGS Bangladesh Limited
Sample Received Date:	12/10/2017
Test Performing Period:	12/10/2017 - 31/10/2017

REMARKS

1.This test document cannot be reproduced in any way, except in full content, without prior approval in writing by the laboratory.

2.The results shown in this test report refer only to the sampling and the sample(s) tested unless otherwise stated.

3. AOX test has been subcontracted from SGS INSTITUT FRESENIUS, sample no 171143243 date- 30.10.2017.

Sign for and on behalf of
SGS Bangladesh Ltd

RAFIQUL ISLAM
Chemical Lab Manager

POSITIVE SUMMARY

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Trestment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	SludgeΦ
Temperature	-	USEPA 170.1 or GB/T 13195	-	°C	-	-	34	-	-	Fulfill Foundational Limit	Δ15 / max 35	Δ10 or 30	Δ5 or 25	-	-	-
BOD (5-day)	-	USEPA 405.1, APHA 5210B, ISO 5815-1 or HJ 505	5	mg/L	-	-	22	-	-	Fulfill Foundational Limit	30	10	5	-	-	-
COD	-	USEPA 410.4, APHA 5220D, ISO 6060 or GB/T 11914	10	mg/L	-	-	100	-	-	Fulfill Foundational Limit	150	80	40	-	-	-
TSS	-	USEPA 160.2, APHA 2540D, ISO 11923 or GB/T 11901	5	mg/L	-	-	21	-	-	Fulfill Foundational Limit	50	15	5	-	-	-
pH Value	-	USEPA 150.1, APHA 4500-H+, ISO 10523 or GB/T 6920	-	-	-	-	8.9	-	-	Fulfill Aspirational Limit	6-9	6-9	6-9	-	-	-
Colour (436nm; 525nm; 620nm)	-	ISO 7887 (Method B)	-	m^{-1}	-	-	9.5; 6.7; 4.9	-	-	Exceed Foundational Limit	7; 5; 3	5; 3; 2	2; 1; 1	-	-	-
Coliform	-	USEPA 9132, ISO 9308 or GB/T 5750.12	25	Bacteria / 100ml	-	-	33	-	-	Fulfill Progressive Limit	400	100	25	-	-	-
Sulfide	-	USEPA 377.1, ISO10304-3 or HJ 84	0.2	mg/L	-	-	6.0	-	-	Exceed Foundational Limit	2	0.5	0.2	-	-	-

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[illegible]

Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Sample Colour Description	-	Visual Observation	-	-	-	-	Reddish	-	-	-	-	-	-	-	-	Dk. Grey
1. Conventional Parameters																
Temperature	-	USEPA 170.1 or GB/T 13195	-	°C	-	-	34	-	-	Fulfill Foundational Limit	Δ15 / max.35	Δ10 or 30	Δ5 or 25	-	-	-
BOD (5-day)	-	USEPA 405.1, APHA 5210B, ISO 5815-1 or HJ 505	5	mg/L	-	-	22	-	-	Fulfill Foundational Limit	30	10	5	-	-	-
COD	-	USEPA 410.4, APHA 5220D, ISO 6060 or GB/T 11914	10	mg/L	-	-	100	-	-	Fulfill Foundational Limit	150	80	40	-	-	-
TSS	-	USEPA 160.2, APHA 2540D, ISO 11923 or GB/T 11901	5	mg/L	-	-	21	-	-	Fulfill Foundational Limit	50	15	5	-	-	-
pH Value	-	USEPA 150.1, APHA 4500-H+, ISO 10523 or GB/T 6920	-	-	-	-	8.9	-	-	Fulfill Aspirational Limit	6-9	6-9	6-9	-	-	-
Colour (436nm; 525nm; 620nm)	-	ISO 7887 (Method B)	-	m^{-1}	-	-	9.5; 6.7; 4.9	-	-	Exceed Foundational Limit	7; 5; 3	5; 3; 2	2; 1; 1	-	-	-
Oil and Grease	-	USEPA 1664, ISO 9377-2, HJ 637	0.5	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	10	2	1	-	-	-
Total phenolics	-	APHA 5530 B, C & D, ISO 14402 or HJ 503	0.001	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.5	0.01	0.001	-	-	-
AOX	-	USEPA 1650, ISO 9562, HJ/T 83	0.1	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	5	1	0.1	-	-	-
Total Nitrogen (Total-N)	-	USEPA 351.2, APHA 4500P-J, APHA 4500N-C, ISO 5663, ISO 29441, HJ 636	5	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	20	10	5	-	-	-
Ammonium Nitrogen (Ammonium-N)	-	USEPA 350.1, APHA 4500NH3-N, ISO 7150, ISO 11732, HJ 535 or HJ 536	0.5	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	10	1	0.5	-	-	-
Total Phosphorus (Total-P)	-	USEPA 365.4, APHA 4500P-J, ISO 6878, ISO 11885 or GB/T 11893	0.1	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	3	0.5	0.1	-	-	-
Coliform	-	USEPA 9132, ISO 9308 or GB/T 5750.12	25	Bacteria / 100ml	-	-	33	-	-	Fulfill Progressive Limit	400	100	25	-	-	-

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Foam	-	N/A	Not visible	-	-	-	Not visible	-	-	Fulfill Aspirational Limit	Not visible	Not visible	Not visible	-	-	-
1. Anions																
Cyanide	-	USEPA 335.2, APHA 4500-CN, HJ 484, HJ 745 (for sludge)	0.05	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.2	0.1	0.05	0.5	mg/kg	n.d.
Sulfide	-	APHA 4500-S2-D, ISO 10530 or GB/T 16489	0.01	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.5	0.05	0.01	-	-	-
Sulfite	-	USEPA 377.1, ISO10304-3 or HJ 84	0.2	mg/L	-	-	**6.0**	-	-	Exceed Foundational Limit	2	0.5	0.2	-	-	-
1. Metals																
Total Antimony (Sb)	7440-36-0	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.01	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.1	0.05	0.01	-	-	-
Total Arsenic (As)	7440-38-2	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.005	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.05	0.01	0.005	1	mg/kg	n.d.
Total Cadmium (Cd)	7440-43-9	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.01	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.1	0.05	0.01	1	mg/kg	n.d.
Total Chromium (Cr)	7440-47-3	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.05	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.2	0.1	0.05	-	-	-
Total Hexavalent Chromium (Cr-VI)	7440-47-3, 18540-29-9	With reference to USEPA 218.6, ISO 18412, GB 7467 or Solvent extraction and derivatisation followed by UV/Vis analysis With reference to USEPA 3060A&7196A for sludge	0.001	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.05	0.005	0.001	1	mg/kg	n.d.
Total Cobalt (Co)	7440-48-4	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.01	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.05	0.02	0.01	-	-	-
Total Copper (Cu)	7440-50-8	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.25	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	1	0.5	0.25	-	-	-
Total Lead (Pb)	7439-92-1	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.01	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.1	0.05	0.01	1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	**CAS No.**	**METHODS**	**Reporting Limit**	**UNIT**	**Incoming Water**	**Raw Wastewater**	**Discharged Wastewater (Direct Discharge)**	**Incoming Water**	**Raw Wastewater**	**Discharged Wastewater (Direct Discharge)**	mg/L	mg/L	mg/L	Reporting Limit	UNIT	**Sludge⊕**
Total Mercury (Hg)	7439-97-6	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, USEPA 7473, ISO 18412, HJ 597 or Acid Digestion followed by ICP or ICP/MS analysis	0.001	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.01	0.005	0.001	0.1	mg/kg	n.d.
Total Nickel (Ni)	7440-02-0	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.05	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.2	0.1	0.05	-	-	-
Total Silver (Ag)	7440-22-4	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.005	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	0.1	0.05	0.005	-	-	-
Total Zinc (Zn)	7440-66-6	With reference to USEPA 200.7, USEPA 200.8, USEPA 6010C, USEPA 6020A, ISO 11885, HJ 700 or Acid Digestion followed by ICP or ICP/MS analysis	0.5	mg/L	-	-	n.d.	-	-	Fulfill Aspirational Limit	5	1	0.5	-	-	-
2A. Alkylphenols (APs) and Alkylphenol Ethoxylates (APEOs)																
Octylphenol (OP), mixed isomers	Multiple, including 140-66-9, 1806-26-4, 27193-28-8	With reference to ISO 18857-2 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.2	mg/kg	n.d.
Nonylphenol (NP), mixed isomers	Multiple, including 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3, 90481-	With reference to ISO 18857-2 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.2	mg/kg	n.d.
Octylphenol ethoxylates (OPEO)	Multiple, including 9002-93-1, 9036-19-5, 68987-90-6	With reference to ISO 18254-1, ISO 18857-2 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.2	mg/kg	n.d.
Nonylphenol ethoxlates (NPEO)	Multiple, including 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4,	With reference to ISO 18254-1, ISO 18857-2 or ASTM D7065 followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.2	mg/kg	n.d.
2B. Chlorobenzenes and Chlorotoluenes (COCs)																
Monochlorobenzenes	108-90-7	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,2-Dichlorobenzene	95-50-1	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,3-Dichlorobenzene	541-73-1	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,4-Dichlorobenzene	106-46-7	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
1,2,3-Trichlorobenzene	87-61-6	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,2,4-Trichlorobenzene	120-82-1	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,3,5-Trichlorobenzene	108-70-3	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,2,3,4-Tetrachlorobenzene	634-66-2	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,2,3,5-Tetrachlorobenzene	634-90-2	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
1,2,4,5-Tetrachlorobenzene	95-94-3	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Pentachlorobenzene	608-93-5	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Hexachlorobenzene	118-74-1	With reference to USEPA 8260B, USEPA 8270D or solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2-Chlorotoluene	95-49-8	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3-Chlorotoluene	108-41-8	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
4-Chlorotoluene	106-43-4	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,3-Dichlorotoluene	32768-54-0	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4-Dichlorotoluene	95-73-8	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,5-Dichlorotoluene	19398-61-9	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	05:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	**CAS No.**	**METHODS**	**Reporting Limit**	**UNIT**	**Incoming Water**	**Raw Wastewater**	**Discharged Wastewater (Direct Discharge)**	**Incoming Water**	**Raw Wastewater**	**Discharged Wastewater (Direct Discharge)**	mg/L	mg/L	mg/L	Reporting Limit	UNIT	**Sludge⊕**
2,6-Dichlorotoluene	118-69-4	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3,4-Dichlorotoluene	95-75-0	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3,5-Dichlorotoluene	25186-47-4	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,3,4-Trichlorotoluene	7359-72-0	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,3,6-Trichlorotoluene	2077-46-5	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4,5-Trichlorotoluene	6639-30-1	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4,6-Trichlorotoluene	23749-65-7	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3,4,5-Trichlorotoluene	21472-86-6	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,3,4,5-Tetrachlorotoluene	76057-12-0	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,3,4,6-Tetrachlorotoluene	875-40-1	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,3,5,6-Tetrachlorotoluene	29733-70-8	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Pentachlorotoluene	877-11-2	With reference to USEPA 8260B, USEPA 8270D or Solvent extraction followed by GC/MS analysis	0.2	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2C. Chlorophenols																
2-Chlorophenol	95-57-8	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivalisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.

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Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

Sample ID					NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
Date of sampling					NA	NA	12/10/2017							Date of sampling		12/10/2017
Sampling Location					NA	NA	After Treatment							Sampling Location		Sludge
Sampling start time					NA	NA	12:00 PM							Sampling start time		07:00 PM
Sampling end time					NA	NA	06:00 PM				Foundational Limit	Progressive Limit	Aspirational Limit	Sampling end time		
Date of sample received					NA	NA	12/10/2017							Date of sample received		12/10/2017
Sample Description					NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
3-Chlorophenol	108-43-0	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
4-Chlorophenol	106-48-9	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,3-Dichlorophenol	576-24-9	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,4-Dichlorophenol	120-83-2	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,5-Dichlorophenol	583-78-8	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,6-Dichlorophenol	87-65-0	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
3,4-Dichlorophenol	95-77-2	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
3,5-Dichlorophenol	591-35-5	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,3,4-Trichlorophenol	15950-66-0	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,3,5-Trichlorophenol	933-78-8	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,3,6-Trichlorophenol	933-75-5	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,4,5-Trichlorophenol	95-95-4	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,4,6-Trichlorophenol	88-06-2	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
3,4,5-Trichlorophenol	609-19-8	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.

SGS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

Sample ID			NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID			1720001388
Date of sampling			NA	NA	12/10/2017							Date of sampling			12/10/2017
Sampling Location			NA	NA	After Treatment							Sampling Location			Sludge
Sampling start time			NA	NA	12:00 PM							Sampling start time			07:00 PM
Sampling end time			NA	NA	06:00 PM							Sampling end time			
Date of sample received			NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received			12/10/2017
Sample Description			NA	Water	Water							Sample Description			Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
2,3,4,5-Tetrachlorophenol	4901-51-3	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,3,4,6-Tetrachlorophenol	58-90-2	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2,3,5,6-Tetrachlorophenol	935-95-5	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
Pentachlorophenols	87-86-5	With reference to USEPA 8270D, ISO 14154 or solvent extraction and derivatisation with KOH, acetic anhydride followed by GC/MS analysis.	0.5	µg/L	-	-	n.d.	-	-	-	-	-	-	0.025	mg/kg	n.d.
2D. Azo dyes																
4-Aminodiphenyl	92-67-1	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Benzidine	92-87-5	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
4-Chloro-o-Toluidine	95-69-2	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2-Naphthylamine	91-59-8	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
o-Aminoazotoluene	97-56-3	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2-Amino-4-Nitrotoluene	99-55-8	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
p-Chloroaniline	106-47-8	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4-Diaminoanisole	615-05-4	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
4,4'-Diaminodiphenylmethane	101-77-9	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

SGS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

Sample ID					NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
Date of sampling					NA	NA	12/10/2017							Date of sampling		12/10/2017
Sampling Location					NA	NA	After Treatment							Sampling Location		Sludge
Sampling start time					NA	NA	12:00 PM							Sampling start time		07:00 PM
Sampling end time					NA	NA	06:00 PM							Sampling end time		
Date of sample received					NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
Sample Description					NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
3,3'-Dichlorobenzidine	91-94-1	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3,3'-Dimethoxybenzidine	119-90-4	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3,3'-Dimethylbenzidine	119-93-7	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
3,3'-Dimethyl-4,4'diaminodiphenylmethane	838-88-0	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
p-Cresidine	120-71-8	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
4,4'-Methylene-Bis(2-Chloroaniline)	101-14-4	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
4,4'-Oxydianiline	101-80-4	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
4,4'-Thiodianiline	139-65-1	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
o-Toluidine	95-53-4	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4-Toluylenediamine	95-80-7	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4,5-Trimethylaniline	137-17-7	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
o-Anisidine	90-04-0	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
p-Aminoazobenzene	60-09-3	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2,4-Xylidine	95-68-1	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

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Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	**CAS No.**	**METHODS**	**Reporting Limit**	**UNIT**	**Incoming Water**	**Raw Wastewater**	**Discharged Wastewater (Direct Discharge)**	**Incoming Water**	**Raw Wastewater**	**Discharged Wastewater (Direct Discharge)**	mg/L	mg/L	mg/L	Reporting Limit	UNIT	**Sludge⊕**
2,6-Xylidine	87-62-7	With reference to USEPA 8270D, EN 14362-1, EN 14362-3 or Solvent extraction with sodium dithonite reduction followed by GC/MS and HPLC analysis.	0.1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2E. Carcinogenic dyes																
Acid Red 26	3761-53-3	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Basic Blue 26	2580-56-5	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Basic Green 4 (malachite green)	10309-95-2	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Basic Green 4 (malachite green chloride)*	569-64-2	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Basic Green 4 (malachite green oxalate)*	2437-29-8	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Basic Red 9	569-61-9	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Basic Violet 14	632-99-5	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Direct Black 38	1937-37-7	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Direct Blue 6	2602-46-2	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Direct Red 28	573-58-0	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 1	2475-45-8	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 3	2475-46-9	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Disperse Orange 11	82-28-0	Solvent extraction followed by LC/MS analysis.	500	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2F. Disperse dyes								-	-	-	-	-	-			
Disperse Brown 1	23355-64-8	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 7	3179-90-6	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 26	3860-63-7	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 35	12222-75-2, 56524-77-7	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 102	12222-97-8	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 106	12223-01-7	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Blue 124	61951-51-7	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Orange 1	2581-69-3	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Orange 3	730-40-5	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Orange 37/59/76	13301-61-6	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Red 1	2872-52-8	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Red 11	2872-48-2	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Disperse Red 17	3179-89-3	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Yellow 1	119-15-3	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Yellow 3	2832-40-8	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Yellow 9	6373-73-5	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Yellow 39	12236-29-2	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Disperse Yellow 49	54824-37-2	Solvent extraction followed by LC/MS analysis.	50	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2G. Flame retardants																
Polybrominated biphenyls (PBBs)	59536-65-1	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Pentabromodiphenyl ethers (PentaBDE)	32534-81-9	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Octabromodiphenyl ethers (OctaBDE)	32536-52-0	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Decabromodiphenyl ethers (DecaBDE)	1163-19-5	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Tris(1-aziridinyl)phosphine oxide) (TEPA)	545-55-1	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Tetrabromobisphenol A (TBBPA)	79-94-7	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

Sample ID					NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
Date of sampling					NA	NA	12/10/2017							Date of sampling		12/10/2017
Sampling Location					NA	NA	After Treatment							Sampling Location		Sludge
Sampling start time					NA	NA	12:00 PM							Sampling start time		07:00 PM
Sampling end time					NA	NA	06:00 PM				Foundational Limit	Progressive Limit	Aspirational Limit	Sampling end time		
Date of sample received					NA	NA	12/10/2017							Date of sample received		12/10/2017
Sample Description					NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Hexabromocyclododecane (HBCDD)	134237-50-6, 134237-51-7, 134237-52-8, 25637-99-4, 3194-	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Bis(2,3-dibromopropyl)phosphate (BIS)	5412-25-9	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	13674-87-8	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Short Chain Chlorinated Paraffins (SCCP), C_{10}-C_{13}	85535-84-8	With reference to USEPA 527, USEPA 8270, USEPA 8321B, ISO 22032 or solvent extraction followed by GC/MS or LC/MS analysis	5	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2H. Glycols								-	-	-	-	-	-			
Bis(2-methoxyethyl)-ether	111-96-6	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
2-Ethoxyethanol	110-80-5	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
2-Ethoxyethyl acetate	111-15-9	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
Ethylene glycol dimethyl ether	110-71-4	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
2-Methoxyethanol	109-86-4	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
2-Methoxyethylacetate	110-49-6	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
2-Methoxypropylacetate	70657-70-4	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.

ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Triethylene glycol dimethyl ether	112-49-2	With reference to USEPA 8270D or solvent extraction followed by GC/MS or LC/MS analysis	50	µg/L	-	-	n.d.	-	-	-	-	-	-	5	mg/kg	n.d.
2I. Halogenated solvents																
1,2-Dichloroethane	107-06-2	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Methylene chloride	75-09-2	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Trichloroethene	79-01-6	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Tetrachloroethene	127-18-4	With reference to USEPA 8260B, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2J. Organotin Compounds																
Mono-, di- and tri-methyltin derivatives	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Monomethyltin (MMT)	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Dimethyltin (DMT)	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Trimethyltin (TMT)	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Mono-, di- and tri-butyltin derivatives	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Monobutyltin (MBT)	1118-46-3, 78763-54-9	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Dibutyltin (DBT)	1002-53-5	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

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Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Tributyltin (TBT)	56573-85-4	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Mono-, di- and tri-octyltin derivatives	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Monooctyltin (MOT)	15231-57-9	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Dioctyltin (DOT)	94410-05-6, 12531-44-4	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Trioctyltin (TOT)	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Mono-, di- and tri-phenyltin derivatives	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Monophenyltin (MPhT)	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Diphenyltin (DPhT)	Multiple	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Triphenyltin (TPhT)	892-20-6, 668-34-8	With reference to ISO17353 and derivatisation with sodium diethyl dithiocarbamate followed by GC/MS analysis.	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
2K. Perfluorinated / Polyfluorinated Chemicals (PFCs)																
PFOS	1763-23-1	With reference to DIN38407-42 or CEN/TS 15968 and followed by LCMS or LC/MS/MS analysis	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.05	mg/kg	n.d.
PFOA	335-67-1	With reference to DIN38407-42 or CEN/TS 15968 and followed by LCMS or LC/MS/MS analysis	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.05	mg/kg	n.d.
PFBS	375-73-5, 59933-66-3, 29420-49-3, 29420-43-3	With reference to DIN38407-42 or CEN/TS 15968 and followed by LCMS or LC/MS/MS analysis	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.05	mg/kg	n.d.
PFHxA	307-24-4	With reference to DIN38407-42 or CEN/TS 15968 and followed by LCMS or LC/MS/MS analysis	0.01	µg/L	-	-	n.d.	-	-	-	-	-	-	0.05	mg/kg	n.d.

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Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

					Sample ID	NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
					Date of sampling	NA	NA	12/10/2017							Date of sampling		12/10/2017
					Sampling Location	NA	NA	After Treatment							Sampling Location		Sludge
					Sampling start time	NA	NA	12:00 PM							Sampling start time		07:00 PM
					Sampling end time	NA	NA	06:00 PM							Sampling end time		
					Date of sample received	NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
					Sample Description	NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)		mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
6:2 FTOH	647-42-7	With reference to DIN38407-42 or CEN/TS 15968 and derivatisation with acetic anhydride followed by GC/MS analysis.	1	µg/L	-	-	n.d.	-	-	-		-	-	-	0.5	mg/kg	n.d.
8:2 FTOH	678-39-7	With reference to DIN38407-42 or CEN/TS 15968 and derivatisation with acetic anhydride followed by GC/MS analysis.	1	µg/L	-	-	n.d.	-	-	-		-	-	-	0.5	mg/kg	n.d.
2L. Phthalates								-	-	-		-	-	-			
Di(2-Ethyl Hexyl) Phthalate (DEHP)	117-81-7	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Di-N-Octyl Phthalate (DNOP)	117-84-0	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Di-Iso-Decyl Phthalate (DIDP)	26761-40-0, 68515-49-1	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Di-Iso-Nonyl Phthalate (DINP)	28553-12-0, 68515-48-0	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Di-N-Hexyl Phthalate (DNHP)	84-75-3	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Dibutyl Phthalate (DBP)	84-74-2	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Benzyl Butyl Phthalate (BBP)	85-68-7	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Dinonyl phthalate (DNP)	84-76-4	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Diethyl Phthalate (DEP)	84-66-2	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.
Di-N-Propyl Phthalate (DPRP)	131-16-8	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-		-	-	-	1	mg/kg	n.d.

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Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Di-Iso-Butyl Phthalate (DIBP)	84-69-5	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Dicyclohexyl Phthalate (DCHP)	84-61-7	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Di-Iso-Octyl Phthalate (DIOP)	27554-26-3	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
1,2-Benzenedicaboxylic acid, Di-C7-11 Branched and Linear Alkyl Esters (DHNUP)	68515-42-4	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
1,2-Benzenedicaboxylic acid, Di-C6-8 Branched Alkyl Esters, C7-rich (DIHP)	71888-89-6	With reference to USEPA 8270D, ISO 18856, or solvent extraction followed by GC/MS analysis	10	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2M. Polycyclic Aromatic Hydrocarbons (PAHs)																
Bezno[a]pyrene	50-32-8	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Anthracene	120-12-7	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Pyrene	129-00-0	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Benzo[ghi]perylene	191-24-2	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Benzo[e]pyrene	192-97-2	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Indeno[1,2,3-cd]pyrene	193-39-5	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Benzo[j]fluoranthene	205-82-3	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Benzo[b]fluoranthene	205-99-2	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.

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Factory II; BANLADESH
Dhaka Region, BANGLADESH

ORGANIC & INORGANIC ANALYSIS

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
			Sampling end time		NA	NA	06:00 PM							Sampling end time		
			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	Sludge⊕
Fluoranthene	206-44-0	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Benzo[k]fluoranthene	207-08-9	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Acenaphthylene	208-96-8	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Chrysene	218-01-9	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Dibenz[a,h]anthracene	53-70-3	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Benzo[a]anthracene	56-55-3	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Acenaphthene	83-32-9	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Phenanthrene	85-01-8	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Fluorene	86-73-7	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
Naphthalene	91-20-3	With reference to USEPA 8270, DIN 38407-39 or solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	1	mg/kg	n.d.
2N. Volatile Organic Compounds (VOCs)																
Benzene	71-43-2	With reference to USEPA 8260B, ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
Xylene	1330-20-7	With reference to USEPA 8260B, ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
o-cresol	95-48-7	With reference to USEPA 8260B, USEPA 8270D, ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

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ORGANIC & INORGANIC ANALYSIS

Factory II; BANLADESH
Dhaka Region, BANGLADESH

			Sample ID		NA	NA	1720001388	Factory Performance			ZDHC Limits			Sample ID		1720001388
			Date of sampling		NA	NA	12/10/2017							Date of sampling		12/10/2017
			Sampling Location		NA	NA	After Treatment							Sampling Location		Sludge
			Sampling start time		NA	NA	12:00 PM							Sampling start time		07:00 PM
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			Date of sample received		NA	NA	12/10/2017				Foundational Limit	Progressive Limit	Aspirational Limit	Date of sample received		12/10/2017
			Sample Description		NA	Water	Water							Sample Description		Sludge
ITEMS	CAS No.	METHODS	Reporting Limit	UNIT	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	Incoming Water	Raw Wastewater	Discharged Wastewater (Direct Discharge)	mg/L	mg/L	mg/L	Reporting Limit	UNIT	SludgeΦ
p-cresol	106-44-5	With reference to USEPA 8260B, USEPA 8270D, ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.
m-cresol	108-39-4	With reference to USEPA 8260B, USEPA 8270D, ISO 11423-1, Purge&Trap, Head-space or Solvent extraction followed by GC/MS analysis	1	µg/L	-	-	n.d.	-	-	-	-	-	-	0.1	mg/kg	n.d.

Remarks:

n.d. = Not Detected

N.A. = Not applicable

Φ Sludge is reported base on dry mass, % moisture = 85.4%

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PIPING PLAN

The piping plan was not provided by the factory

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SAMPLING PHOTOS

INCOMING WATER
SAMPLING LOCATION, CLOSE-UP VIEW

DISCHARGE WATER
GPS Data: 24°17.816' N, 090°23.188' E
SAMPLING LOCATION, CLOSE-UP VIEW

SAMPLING LOCATION, FAR VIEW

SAMPLING LOCATION, FAR VIEW

SAMPLING PHOTOS

RAW WATER
GPS Data:
SAMPLING LOCATION, CLOSE-UP VIEW

SLUDGE
GPS Data: 24°17.046' N, 090°23.098' E
SAMPLING LOCATION, CLOSE-UP VIEW

SAMPLING LOCATION, FAR VIEW

SAMPLING LOCATION, FAR VIEW

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

TEST REPORT

Technical Report **(6817)289-0102** October 31, 2017

Date Received October 15, 2017

Factory Company Name:	**Factory III, Devision I; BANLADESH**
Factory Address:	Dhaka Region, BANGLADESH
Project No.:	
Client Reference No.:	
Sample Type:	I001) Incoming water – Grab Samples* I002) Discharged Wastewater – Time-Weighted Composite Grab Samples* I003) Sludge – Grab Samples*
Sample Pick Up Date:	October 15, 2017
Discharge Type:	Direct Discharge
Wastewater Discharge to:	Factory Owned ETP
On-Site Effluent Treatment Plant (ETP):	Yes
Test Period:	October 16, 2017 To October 31, 2017
Sample Description:	I001) Incoming water I002) Discharged Wastewater I003) Sludge

REMARK

If there are questions or concerns on this report, please contact the following persons:

General enquiry	Mr. Abu Hanif, Mail: abu.hanif@bd.bureauveritas.com
Invoicing	Mr. Mahabubur Rahman, Mail: mahabubur.rahman@bd.bureauveritas.com
Technical enquiry-Chemical	Mr. M. Nur Alam, Mail: nur.alam@bd.bureauveritas.com

This report shown the test result of the auxiliary chemical and/or raw material samples, which collected during particular factory audit. The results of this report shall not be used for any regulatory compliance purposes.

* The sampling is agreed with client.

BUREAU VERITAS
CONSUMER PRODUCTS SERVICES (BANGLADESH) LTD.

M. NUR ALAM
SENIOR MANAGER
ANALYTICAL LABORATORY

Prepared By: Md. Abu Taher

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Photo of the Sample/ Sampling Location

I001) Incoming water

I002) Discharged Wastewater

I003) Sludge

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Executive Summary

1A) Conventional Parameters	I001	I002	I003
Temperature	NA	See result in page 5-7	NA
TSS			
COD			
pH Value			
Color [m^{-1}]			
BOD_5			
Total-P			
AOX			
Oil and Grease			
Foam			
1B) Conventional Parameters –METALS	•	•	o

ZDHC MRSL Substances	I001	I002	I003
2A) APs and APEOs	NT	o	o
2B) Chlorobenzenes and Chlorotoluenes	NT	o	o
2C) Chlorophenols	NT	o	o
2D) Azo Dyes	o	o	•
2E) Carcinogenic Dyes	NT	o	o
2F) Disperse Dyes	NT	o	o
2G) Flame Retardants	NT	o	o
2H) Glycols	NT	o	o
2I) Halogenated Solvents	NT	o	o
2J) Organotin Compounds	NT	o	o
2K) Perfluorinated and Polyfluorinated Chemicals	NT	o	o
2L) Phthalates	NT	o	o
2M) Poly Aromatic Hydrocarbons	NT	o	o
2N) Volatile Organic Compounds	NT	o	o

Note / Key :

- • – Detected
- o – Not Detected
- NT – Not Tested
- NA– Not Applicable

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Objective

The environment samples were tested for below parameters.

1A) Conventional Parameters
1B) Conventional Parameters – METALS
2A) APs and APEOs
2B) Chlorobenzenes and Chlorotoluenes
2C) Chlorophenols
2D) Azo Dyes
2E) Carcinogenic Dyes
2F) Disperse Dyes
2G) Flame Retardants
2H) Glycols
2I) Halogenated Solvents
2J) Organotin Compounds
2K) Perfluorinated and Polyfluorinated Chemicals
2L) Phthalates
2M) Poly Aromatic Hydrocarbons
2N) Volatile Organic Compounds

Sampling Plan

Basically, three environment samples were sampled per factory, including 1) Incoming water; 2) Discharged Wastewater and 3) Sludge. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is time-weighted composite grab samples (agreed with client.). Composite sampling shall be performed for no less than six hours, with no more than one hour between discrete samples. Each discrete sample shall be of equal volume. Wastewater and freshwater samples should, as much as possible, be collected simultaneously, during the time that PU is in normal operation. The sampling shall aim to analyse the snapshot of water quality characteristics of the operating PU. Under no circumstance shall samples be taken during times when the production process is not running or the wastewater is diluted due to heavy rainfall, etc.

Remark :

- Sampling procedure is with reference to below standards:
  1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
  2) Australia EPA (Victoria) Guideline (June 2009), Sampling and Analysis of Waters, Wastewaters, Soils and Wastes.
  3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
  4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.
- Field data records are attached in Appendix B.

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Test Result

1A) Conventional Parameters

Temperature

Test Method : Measurement by thermometer

Tested Item(s)	Result	Unit	Conclusion
I002	31.5 (Foundational)	deg. C	DATA

Note:

deg. C = degree Celsius (°C)
Foundational Limit: ▲15 / max. 35°C; Progressive Limit: ▲10 / max. 30°C; Aspirational Limit: ▲5 / max. 25°C

Total Suspended Solids (TSS)

Test Method : Reference to APHA 22nd Edition-2540D & ALPA 2540D

Tested Item(s)	Result	Unit	Conclusion
I002	21 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 50 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Chemical Oxygen Demand (COD)

Test Method : Reference to ALPA 5220B & EPA 410.3

Tested Item(s)	Result	Unit	Conclusion
I002	96 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 150 mg/L; Progressive Limit: 80 mg/L; Aspirational Limit: 40 mg/L

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pH Value

Test Method : Reference to ALPA 4500-H+B & EPA150.2

-	Unit	Result
Test Item(s)	-	I002
Parameter	-	-
Temp. of sample	deg. C	25
pH value of sample	-	6.9
Conclusion	-	DATA

Note:

Temp. = Temperature deg. C = degree Celsius (°C)
Limit: 6 - 9

Color [m^{-1}] (436nm; 525; 620nm)

Test Method : ISO 7887: 2011(E), B

Tested Item(s)	Parameter	pH	Result	Unit	Conclusion
I002	Trial (λ=436 nm)	6.8	1.5 (Aspirational)	m^{-1}	DATA
	Trial (λ=525 nm)	6.8	0.7 (Aspirational)	m^{-1}	DATA
	Trial (λ=620 nm)	6.8	0.2 (Aspirational)	m^{-1}	DATA

Note:
Foundational Limit: 7;5;3 m^{-1}; Progressive Limit: 5;3;2 m^{-1}; Aspirational Limit: 2;1;1 m^{-1}

Biochemical Oxygen Demand (BOD5)

Test Method : Reference to APHA 22nd Edition-5210B & ALPA 5210B

Tested Item(s)	Result	Unit	Conclusion
I002	14 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 30 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

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Total Phosphorus (Total-P)

Test Method : Reference to APHA 22nd Edition -4500-P.E (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	0.2677 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 3 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.1 mg/L

Adsorbable Organic Halogen (AOX)

Test Method : Reference to HJ/T 83

Tested Item(s)	Result	Unit	Conclusion
I002	1.60 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 5 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.1 mg/L

Oil and Grease

Test Method : Reference to APHA 22nd Edition -5520 B (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	5 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 10 mg/L; Progressive Limit: 2 mg/L; Aspirational Limit: 0.5 mg/L

Foam

Test Method : Visual

Tested Item(s)	Result	Unit	Conclusion
I002	No Foam	-	DATA

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1B) Conventional Parameters – METALS

Heavy Metals	**I001** *(mg/L)*	**I002** *(mg/L)*	**I003** *(mg/kg)*
Antimony(Sb) *Foundational Limit: 0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	N/A
Chromium(Cr), total *Foundational Limit: 0.2 mg/L;* *Progressive Limit: 0.1 mg/L;* *Aspirational Limit: 0.05 mg/L*	0.005 (Aspirational)	0.007 (Aspirational)	
Cobalt(Co) *Foundational Limit: 0.05 mg/L;* *Progressive Limit: 0.02 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	
Copper(Cu) *Foundational Limit: 1 mg/L;* *Progressive Limit: 0.5 mg/L;* *Aspirational Limit: 0.25 mg/L*	0.030 (Aspirational)	0.045 (Aspirational)	
Nickel (Ni) *Foundational Limit: 0.2 mg/L;* *Progressive Limit: 0.1 mg/L;* *Aspirational Limit: 0.05 mg/L*	ND (Aspirational)	0.002 (Aspirational)	
Silver (Ag) *Foundational Limit: 0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.005 mg/L*	ND (Aspirational)	ND (Aspirational)	
Zinc(Zn) *Foundational Limit: 5 mg/L;* *Progressive Limit: 1 mg/L;* *Aspirational Limit: 0.5 mg/L*	ND (Aspirational)	0.213 (Aspirational)	
Arsenic (As) *Foundational Limit: 0.05 mg/L;* *Progressive Limit: 0.01 mg/L;* *Aspirational Limit: 0.005 mg/L*	0.001 (Aspirational)	ND (Aspirational)	ND (Aspirational)
Cadmium(Cd) *Foundational Limit: 0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Lead(Pb) *Foundational Limit:0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	0.005 (Aspirational)	ND (Aspirational)
Mercury (Hg) *Foundational Limit: 0.01 mg/L;* *Progressive Limit: 0.005 mg/L;* *Aspirational Limit: 0.001 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Chromium VI(CrVI) *Foundational Limit: 0.05 mg/L;* *Progressive Limit: 0.005 mg/L;* *Aspirational Limit: 0.001 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Cyanide(CN-) *Foundational Limit: 0.2 mg/L;* *Progressive Limit: 0.1 mg/L;* *Aspirational Limit: 0.05 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)

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2D) Azo Dyes

Azo Dyes	I001 *(ug/L)*	I002 *(ug/L)*	I003 *(mg/kg)*
4,4`-Methylene-bis-(2-chloro-aniline)	ND	ND	ND
4,4'-methylenedianiline	ND	ND	ND
4,4`-Oxydianiline	ND	ND	ND
4-Chloroaniline	ND	ND	ND
3,3`-Dimethoxybenzidine	ND	ND	ND
3,3`-Dimethylbenzidine	ND	ND	ND
6-methoxy-m-toluidine (p-Cresidine)	ND	ND	ND
2,4,5-Trimethylaniline	ND	ND	ND
4,4`-Thiodianiline	ND	ND	ND
4-Aminoazobenzene	ND	ND	ND
4-Methoxy-m-phenylenediamine	ND	ND	ND
4,4`-Methylene-di-o-toluidine	ND	ND	ND
2,6-Xylidine	ND	ND	ND
o-Anisidine	ND	ND	ND
2-Naphthylamine	ND	ND	ND
3,3`-Dichlorobenzidine	ND	ND	ND
4-Aminodiphenyl	ND	ND	ND
Benzidine	ND	ND	ND
o-Toluidine	ND	ND	ND
2,4-Xylidine	ND	ND	ND
4-Chloro-o-toluidine	ND	ND	ND
4-Methyl-m-phenylenediamine	ND	ND	0.4
o-Aminoazotoluene	ND	ND	ND
5-nitro-o-toluidine	ND	ND	ND

Others Priority Chemical Groups

	I001	I002	I003
2A) APs and APEOs	NT	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	NT	ND	ND
2C) Chlorophenols	NT	ND	ND
2E) Carcinogenic Dyes	NT	ND	ND
2F) Disperse Dyes	NT	ND	ND
2G) Flame Retardants	NT	ND	ND
2H) Glycols	NT	ND	ND
2I) Halogenated Solvents	NT	ND	ND
2J) Organotin Compounds	NT	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	NT	ND	ND
2L) Phthalates	NT	ND	ND
2M) Poly Aromatic Hydrocarbons	NT	ND	ND
2N) Volatile Organic Compounds	NT	ND	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in tables of Appendix A.
- ND = Not detected (Please refer to reporting limit shown in Appendix A.).
- ppb = part(s) per billion.
- NT = Not Tested

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SSS

APPENDIX A

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
2A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Octylphenol OP, mixed isomers	Various (incl. 140-66-9, 1806-26-4, 27193-28-8)	5	0.2	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC/MS or LC/MS(-MS) OPEO/NPEO: ISO18857-2 or ASTM D7065(LC/MS; GC/MS or LC/MSMS for n=1,2) APEO 1-18
	Nonylphenol NP	Various (incl. 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3)	5	0.2	
	Nonylphenol Ethoxylates OPEO (2-16)	Various (incl. 9002-93-1, 9036-19-5, 68987-90-6)	5	0.2	
	Nonylphenol Ethoxylates NPEO (2-18)	Various (inc. 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0)	5	0.2	
2B. Chlorobenzenes and Chlorotoluenes	Chlorobenzene	108-90-7	0.2	0.1	USEPA 8260B,8270D. Dichloromethane extraction followed by GC/MS
	Dichlorobenzene	Various	0.2	0.1	
	Trichlorobenzene	Various	0.2	0.1	
	Tetrachlorobenzene	Various	0.2	0.1	
	1,2-Dichlorobenzene	95-50-1	0.2	0.1	
	1,3-Dichlorobenzene	541-73-1	0.2	0.1	
	1,4-Dichlorobenzene	106-46-7	0.2	0.1	
	1,2,3-Trichlorobenzene	87-61-6	0.2	0.1	
	1,2,4-Trichlorobenzene	120-82-1	0.2	0.1	
	1,3,5-Trichlorobenzene	108-70-3	0.2	0.1	
	1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	0.1	
	1,2,3,5-Tetraclorobenzene	634-90-2	0.2	0.1	
	1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	0.1	
	Pentachlorobenzene	608-93-5	0.2	0.1	
	Hexachlorobenzene	1198-74-1	0.2	0.1	
	2-Chlorotoluene	95-49-8	0.2	0.1	
	3-Chlorotoluene	108-41-8	0.2	0.1	
	4-Chlorotoluene	106-43-4	0.2	0.1	
	2,3-Dichlorotoluene	32768-54-0	0.2	0.1	
	2,4-Dichlorotoluene	95-73-8	0.2	0.1	
	2,5-Dichlorotoluene	19398-61-9	0.2	0.1	
	2,6-Dichlorotoluene	118-69-4	0.2	0.1	
	3,4-Dichlorotoluene	95-75-0	0.2	0.1	
	3,5-Dichlorotoluene	25186-47-4	0.2	0.1	
	2,3,4-Trichlorotoluene	7359-72-0	0.2	0.1	
	2,3,6-Trichlorotoluene	2077-46-5	0.2	0.1	
	2,4,5-Trichlorotoluene	6639-30-1	0.2	0.1	
	2,4,6-Trichlorotoluene	23749-65-7	0.2	0.1	
	3,4,5-Trichlorotoluene	21472-86-6	0.2	0.1	
	2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	0.1	
	2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	0.1	
	2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	0.1	
	Pentachlorotoluene	877-11-2	0.2	0.1	
2C. Chlorophenols	2-Chlorophenol	95-57-8	0.5	0.025	USEPA 8270 D Solvent extraction, derivatisation with
	3-Chlorophenol	108-43-0	0.5	0.025	
	4-Chlorophenol	106-48-9	0.5	0.025	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	2,3-Dichlorophenol	576-24-9	0.5	0.025	KOH, acetic anhydride followed by GC/MS
	2,4-Dichlorophenol	120-83-2	0.5	0.025	
	2,5-Dichlorophenol	583-78-8	0.5	0.025	
	2,6-Dichlorophenol	87-65-0	0.5	0.025	
	3,4-Dichlorophenol	95-77-2	0.5	0.025	
	3,5-Dichlorophenol	591-35-5	0.5	0.025	
	2,3,4-Trichlorophenol	15950-66-0	0.5	0.025	
	2,3,5-Trichlorophenol	933-78-8	0.5	0.025	
	2,3,6-Trichlorophenol	933-75-5	0.5	0.025	
	2,4,5-Trichlorophenol	95-95-4	0.5	0.025	
	2,4,6-Trichlorophenol	88-06-2	0.5	0.025	
	3,4,5-Trichlorophenol	609-19-8	0.5	0.025	
	2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	0.025	
	2,3,4,6-Tetrachlorophenol	58-90-2	0.5	0.025	
	2,3,5,6-Tetrachlorophenol	935-95-5	0.5	0.025	
	Pentachlorophenol (PCP)	87-86-5	0.5	0.025	
	Tetrachlorophenol (TeCP)	Various (incl. 25167-83-3)	0.5	0.025	
2D. Dyes - Azo (Forming Restricted Amines)	4,4`-Methylene-bis-(2-chloro-aniline)	101-14-4	0.1	0.1	EN 14362. Reduction step with Sodiumdithionite, solvent extraction, GC/MS or LC/MS
	4,4'-methylenedianiline	101-77-9	0.1	0.1	
	4,4`-Oxydianiline	101-80-4	0.1	0.1	
	4-Chloroaniline	106-47-8	0.1	0.1	
	3,3`-Dimethoxybenzidine	119-90-4	0.1	0.1	
	3,3`-Dimethylbenzidine	119-93-7	0.1	0.1	
	6-methoxy-m-toluidine (p-Cresidine)	120-71-8	0.1	0.1	
	2,4,5-Trimethylaniline	137-17-7	0.1	0.1	
	4,4`-Thiodianiline	139-65-1	0.1	0.1	
	4-Aminoazobenzene	60-09-3	0.1	0.1	
	4-Methoxy-m-phenylenediamine	615-05-4	0.1	0.1	
	4,4`-Methylene-di-o-toluidine	838-88-0	0.1	0.1	
	2,6-Xylidine	87-62-7	0.1	0.1	
	o-Anisidine	90-04-0	0.1	0.1	
	2-Naphthylamine	91-59-8	0.1	0.1	
	3,3`-Dichlorobenzidine	91-94-1	0.1	0.1	
	4-Aminodiphenyl	92-67-1	0.1	0.1	
	Benzidine	92-87-5	0.1	0.1	
	o-Toluidine	95-53-4	0.1	0.1	
	2,4-Xylidine	95-68-1	0.1	0.1	
	4-Chloro-o-toluidine	95-69-2	0.1	0.1	
	4-Methyl-m-phenylenediamine	95-80-7	0.1	0.1	
	o-Aminoazotoluene	97-56-3	0.1	0.1	
	5-nitro-o-toluidine	99-55-8	0.1	0.1	
2E. Dyes-Carcionogenic or Equivalent Concern	C.I. Direct Black 38	1937-37-7	500	1	Liquid Extraction LC/MS
	C.I. Direct Blue 6	2602-46-2	500	1	
	C.I. Acid Red 26	3761-53-3	500	1	
	C.I. Basic Red 9	569-61-9	500	1	
	C.I. Direct Red 28	573-58-0	500	1	
	C.I. Basic Violet 14	632-99-5	500	1	
	C.I. Disperse Blue 1	2475-45-8	500	1	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	C.I. Disperse Blue 3	2475-46-9	500	1	
	C.I. Basic Blue 26 (withMichler's Ketone > 0.1%)	2580-56-5	500	1	
	C.I. Basic Green 4(malachite green chloride)	569-64-2	500	1	
	C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	1	
	C.I. Basic Green 4(malachite green)	10309-95-2	500	1	
	Disperse Orange 11	82-28-0	500	1	
2F. Dyes-disperse (sensitizing)	Disperse Yellow 1	119-15-3	50	1	Liquid Extraction LC/MS
	Disperse Blue 102	12222-97-8	50	1	
	Disperse Blue 106	12223-01-7	50	1	
	Disperse Yellow 39	12236-29-2	50	1	
	Disperse Orange 37/59/76	13301-61-6	50	1	
	Disperse Brown 1	23355-64-8	50	1	
	Disperse Orange 1	2581-69-3	50	1	
	Disperse Yellow 3	2832-40-8	50	1	
	Disperse Red 11	2872-48-2	50	1	
	Disperse Red 1	2872-52-8	50	1	
	Disperse Red 17	3179-89-3	50	1	
	Disperse Blue 7	3179-90-6	50	1	
	Disperse Blue 26	3860-63-7	50	1	
	Disperse Yellow 49	54824-37-2	50	1	
	Disperse Blue 35	12222-75-2	50	1	
	Disperse Blue 124	61951-51-7	50	1	
	Disperse Yellow 9	6373-73-5	50	1	
	Disperse Orange 3	730-40-5	50	1	
	Disperse Blue 35	56524-77-7	50	1	
2G. Flame Retardants	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	5	1	ISO 22032, USEPA527 and USEPA8321B. Dichloromethane extraction GC/MS or LC/MS(-MS)
	Decabromodiphenyl ether (DecaBDE)	1163-19-5	5	1	
	Tris(2,3-dibromopropyl) phosphate (TRIS/TDBPP)	126-72-7	5	1	
	Pentabromodiphenyl ether (PentaBDE)	32534-81-9	5	1	
	Octabromodiphenyl ether (OctaBDE)	32536-52-0	5	1	
	Bis(2,3-dibromopropyl) phosphate (BIS/BDBPP)	5412-25-9	5	1	
	Tris(aziridinyl)-phosphineoxide (TEPA)	545-55-1	5	1	
	Polybromobiphenyls (PBBs)	59536-65-1	5	1	
	Tetrabromobisphenol A (TBBPA)	79-94-7	5	1	
	Hexabromocyclododecane (HBCDD)	3194-55-6	5	1	
	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	5	1	
	Tris(1,3-dichloro-isopropyl) phosphate	13674-87-8	5	1	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	(TDCP)				
	Short chain chlorinated paraffins (SCCPs)	85535-84-8	5	1	
2H. Glycols	Bis(2-methoxyethyl)-ether	111-96-6	50	5	US EPA 8270 Liquid Extraction LC/MS
	2-ethoxyethanol	110-80-5	50	5	
	2-ethoxyethyl acetate	111-15-9	50	5	
	Ethylene glycol dimethyl ether	110-71-4	50	5	
	2-methoxyethanol	109-86-4	50	5	
	2-methoxyethylacetate	110-49-6	50	5	
	2-methoxypropylacetate	70657-70-4	50	5	
	Triethylene glycol dimethyl ether	112-49-2	50	5	
2I. Halogenated Solvents	1,2-Dichloroethane	107-06-2	1	1	USEPA 8260B Headspace GC/MS or Purgeand-Trap-GC/MS
	Methylene Chloride	75-09-2	1	1	
	Trichloroethylene	79-01-6	1	1	
	Tetrachloroethylene	127-18-4	1	1	
2J. Organotin Compounds	Mono-, di- and tri-methyltin derivatives	Various (incl. 993-16-8, 753-73-1, 1066-45-1)	0.01	0.1	ISO 17353 Derivatisation with NaB(C2H5) GC/MS
	Mono-, di- and tri-butyltin derivatives	Various (incl. 78763-54-9, 1118-46-3, 1002-53-5, 683-18-1, 36643-28-4, 56573-85-4, 1461-22-9)	0.01	0.1	
	Mono-, di- and tri-phenyltin derivatives	Various (1124-19-2, 1011-95-6, 6381-06-2, 1135-99-5, 892-20-6, 639-58-7, 668-34-8)	0.01	0.1	
	Mono-, di- and tri-octyltin derivatives	Various (incl. 15231-44-4, 3091-25-6, 94410-05-6, 3542-36-7, 869-59-0, 2587-76-0)	0.01	0.1	
2K. Perfluorinated and Polyfluorinated Chemicals (PFCs)	Perfluorooctanesulfonic acid (PFOS)	355-46-4 ,432-50-7	0.01	0.05	DIN 38407-42 (modified) Ionic PFC: Concentration or direct injection, LC/MS(-MS); Non-ionic PFC (FTOH): derivatisation with acetic anhydride, followed by GC/MS
	Perfluoro-n-octanoic acid (PFOA)	335-67-1/ 335-95-5	0.01	0.05	
	Perfluorobutanesulfonic acid (PFBS)	29420-49-3, 29420-43-3	0.01	0.05	
	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	0.01	0.05	
	8:2 FTOH	**678-39-7**	**1**	0.5	
	6:2 FTOH	**647-42-7**	**1**	0.5	
2L. Phthalates (including all other esthers of phthalic acid)	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	1	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
	Dimethoxyethyl phthalate (DMEP)	117-82-8	10	1	
	Di-n-octyl phthalate (DNOP)	117-84-0	10	1	
	Di-iso-decyl phthalate (DIDP)	26761-40-0	10	1	
	Di-iso-nonyl phthalate (DINP)	28553-12-0	10	1	
	Di-n-hexyl phthalate (DnHP)	84-75-3	10	1	
	Dibutyl phthalate (DBP)	84-74-2	10	1	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg) /(ppm)	
	Butyl benzyl phthalate (BBP)	85-68-7	10	1	
	Dinonyl phthalate (DNP)	84-76-4	10	1	
	Diethyl phthalate (DEP)	84-66-2	10	1	
	Di-n-propyl phthalate (DPRP)	131-16-8	10	1	
	Di-iso-butyl phthalate (DIBP)	84-69-5	10	1	
	Di-cyclohexyl phthalate (DCHP)	84-61-7	10	1	
	Di-iso-octyl phthalate (DIOP)	27554-26-3	10	1	
	1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	10	1	
	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	10	1	
2M. Poly Aromatic Hydrocarbons (PaHs)	Benzo[a]pyrene (BaP)	50-32-8	1	1	DIN 38407-39 Solvent extraction GC/MS
	Anthracene	120-12-7	1	1	
	Pyrene	129-00-0	1	1	
	Benzo[ghi]perylene	191-24-2	1	1	
	Benzo[e]pyrene	192-97-2	1	1	
	Indeno[1,2,3-cd]pyrene	193-39-5	1	1	
	Benzo[j]fluoranthene	205-82-3	1	1	
	Benzo[b]fluoranthene	205-99-2	1	1	
	Fluoranthene	206-44-0	1	1	
	Benzo[k]fluoranthene	207-08-9	1	1	
	Acenaphthylene	208-96-8	1	1	
	Chrysene	218-01-9	1	1	
	Dibenz[a,h]anthracene	53-70-3	1	1	
	Benzo[a]anthracene	56-55-3	1	1	
	Acenaphthene	83-32-9	1	1	
	Phenanthrene	85-01-8	1	1	
	Fluorene	86-73-7	1	1	
	Naphthalene	91-20-3	1	1	
2N. Volatile Organic Compound (VOCs)	Benzene	71-43-2	1	0.1	ISO 11423-1 Headspace- or Purge-and-Trap-GC/MS
	Xylene	1330-20-7	1	0.1	
	o-cresol	95-48-7	1	0.1	
	p-cresol	106-44-5	1	0.1	
	m-cresol	108-39-4	1	0.1	
1A. Conventional Parameters	Temperature	—	N/A	N/A	Apply the standard methods that best apply to the region (ISO, EU, US, China), please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Exceeded Foundational Limit, Foundational,
	TSS	—	N/A	N/A	
	COD	—	N/A	N/A	
	Total-N	—	N/A	N/A	
	pH	—	N/A	N/A	
	Color [m^{-1}] (436nm; 525nm; 620nm)	—	N/A	N/A	
	BOD5	—	N/A	N/A	
	Ammonium-N	—	N/A	N/A	
	Total-P	—	N/A	N/A	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	AoX	—	N/A	N/A	Progressive, and Aspirational).
	Oil and Grease	—	N/A	N/A	
	Phenol	—	N/A	N/A	
	Coliform(bacteria/100ml)	—	N/A	N/A	
	Persistent Foam	—	Not visible	Not visible	
	ANIONS				
	Sulfide	—	N/A	N/A	
	Sulfite	—	N/A	N/A	
Group	Substance (Testing parameter)	CAS No.	Report Limit		**Name of Testing Method**
			Waste water (mg/L)/(ppm)	**Sludge (mg/kg)/(ppm)**	
1B. Conventional Parameters - **METALS**	Antimony(Sb)	7440-36-0	0.001	N/A	Various Acid Digestion with ICP analysis please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Exceeded Foundational Limit, Foundational, Progressive, and Aspirational).
	Chromium(Cr), total	7440-47-3	0.001	N/A	
	Cobalt(Co)	7440-48-4	0.001	N/A	
	Copper(Cu)	7440-50-8	0.001	N/A	
	Nickel (Ni)	7440-02-0	0.001	N/A	
	Silver (Ag)	7440-22-4	0.001	N/A	
	Zinc(Zn)	7440-66-6	0.001	N/A	
	Arsenic (As)	7440-38-2	0.001	1	
	Cadmium(Cd)	7440-43-9	0.0001	1	
	Lead(Pb)	7439-92-1	0.001	1	
	Mercury (Hg)	7439-97-6	0.00005	0.1	
	Chromium VI(CrVI)	18540-29-9	0.001	1	Various Solvent extraction and derivatisation followed by UV analysis
	Cyanide(CN-)	Various (incl. 57-12-5)	0.02	0.5	With reference to APHA 4500 CN—B,C&E and followed by UV analysis

Note / Key :

ppb = part(s) per billion ; ppm – part(s0 per million
U. S. EPA = United States Environmental Protection Agency
APHA = American Public Health Association

Comment 1: The report [(6817)289-0102] is sub-contracted to BVCPS (Shanghai, China) For Perfluorinated and Polyfluorinated Chemicals, Flame Retardants, Glycols & AOX Test.

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TEST REPORT

Technical Report **(6817)284-0229** October 26, 2017

Date Received October 10, 2017

Factory Company Name:	**Factory III, Devision II; BANLADESH**
Factory Address:	Dhaka Region, BANGLADESH
Project No.:	
Client Reference No.:	
Sample Type:	Wastewater - Time-Weighted Composite Grab Samples*
Sample Pick Up Date:	October 10, 2017
Discharge Type:	Direct Discharge
Wastewater Discharge to:	Factory Owned ETP
On-Site Effluent Treatment Plant (ETP):	Yes
Test Period:	October 11, 2017 To October 26, 2017

Sample Description:

I001) Incoming water
I002) Discharged Wastewater
I003) Sludge

REMARK

If there are questions or concerns on this report, please contact the following persons:

General enquiry	Mr. Abu Hanif, Mail: abu.hanif@bd.bureauveritas.com
Invoicing	Mr. Mahabubur Rahman, Mail: mahabubur.rahman@bd.bureauveritas.com
Technical enquiry-Chemical	Mr. M. Nur Alam, Mail: nur.alam@bd.bureauveritas.com

This report shown the test result of the auxiliary chemical and/or raw material samples, which collected during particular factory audit. The results of this report shall not be used for any regulatory compliance purposes.

* The sampling is agreed with client.

BUREAU VERITAS
CONSUMER PRODUCTS SERVICES (BANGLADESH) LTD.

M. NUR ALAM
SENIOR MANAGER
ANALYTICAL LABORATORY

Prepared By: Md. Abu Taher

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Photo of the Sample/ Sampling Location

I001) Incoming water

I002) Discharged Wastewater

I003) Sludge

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Executive Summary

1A) Conventional Parameters	I001	I002	I003
Temperature	NA	See result in page 5-8	NA
TSS			
COD			
Total-N			
pH Value			
Color [m^{-1}]			
BOD_5			
Ammonium-N			
Total-P			
AOX			
Oil and Grease			
Phenol			
Coliform			
Foam			
ANIONS - Sulfide			
ANIONS - Sulfite			
1B) Conventional Parameters –METALS	•	•	o

ZDHC MRSL Substances	I001	I002	I003
2A) APs and APEOs	NT	o	o
2B) Chlorobenzenes and Chlorotoluenes	NT	o	o
2C) Chlorophenols	NT	o	o
2D) Azo Dyes	NT	o	o
2E) Carcinogenic Dyes	NT	o	o
2F) Disperse Dyes	NT	o	o
2G) Flame Retardants	NT	o	o
2H) Glycols	NT	o	o
2I) Halogenated Solvents	NT	o	o
2J) Organotin Compounds	NT	o	o
2K) Perfluorinated and Polyfluorinated Chemicals	NT	o	o
2L) Phthalates	NT	o	o
2M) Poly Aromatic Hydrocarbons	NT	o	o
2N) Volatile Organic Compounds	NT	o	o

Note / Key :

- • – Detected
- o – Not Detected
- NT – Not Tested
- NA– Not Applicable

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Objective

The environment samples were tested for below parameters.

1A) Conventional Parameters
1B) Conventional Parameters – METALS
2A) APs and APEOs
2B) Chlorobenzenes and Chlorotoluenes
2C) Chlorophenols
2D) Azo Dyes
2E) Carcinogenic Dyes
2F) Disperse Dyes
2G) Flame Retardants
2H) Glycols
2I) Halogenated Solvents
2J) Organotin Compounds
2K) Perfluorinated and Polyfluorinated Chemicals
2L) Phthalates
2M) Poly Aromatic Hydrocarbons
2N) Volatile Organic Compounds

Sampling Plan

Basically, three environment samples were sampled per factory, including 1) Incoming water; 2) Discharged Wastewater and 3) Sludge. Total number of sample collected will be depended on the actual factory facilities and manufacturing processes.

Method of sampling used is time-weighted composite grab samples (agreed with client.). Composite sampling shall be performed for no less than six hours, with no more than one hour between discrete samples. Each discrete sample shall be of equal volume. Wastewater and freshwater samples should, as much as possible, be collected simultaneously, during the time that PU is in normal operation. The sampling shall aim to analyse the snapshot of water quality characteristics of the operating PU. Under no circumstance shall samples be taken during times when the production process is not running or the wastewater is diluted due to heavy rainfall, etc.

Remark :

- Sampling procedure is with reference to below standards:
  1) South Australia EPA Guidelines (June 2007), Regulatory Monitoring and Testing Water and Wastewater Sampling.
  2) Australia EPA (Victoria) Guideline (June 2009), Sampling and Analysis of Waters, Wastewaters, Soils and Wastes.
  3) ISO 5667-3:2003, Water Quality - Sampling - Part 3: Guidance on the Preservation and Handling of Water Samples.
  4) ASTM D3976-92 (Reapproved 2010), Standard Practice for Preparation of Sediment Samples for Chemical Analysis.
- Field data records are attached in Appendix B.

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Test Result

1A) Conventional Parameters

Temperature

Test Method : Measurement by thermometer

Tested Item(s)	Result	Unit	Conclusion
I002	33.7 (Foundational)	deg. C	DATA

Note:

deg. C = degree Celsius (°C)
Foundational Limit: ▲15 / max. 35°C; Progressive Limit: ▲10 / max. 30°C; Aspirational Limit: ▲5 / max. 25°C

Total Suspended Solids (TSS)

Test Method : Reference to APHA 22nd Edition-2540D & ALPA 2540D

Tested Item(s)	Result	Unit	Conclusion
I002	23 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 50 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Chemical Oxygen Demand (COD)

Test Method : Reference to ALPA 5220B & EPA 410.3

Tested Item(s)	Result	Unit	Conclusion
I002	80 (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 150 mg/L; Progressive Limit: 80 mg/L; Aspirational Limit: 40 mg/L

Total Nitrogen (Total-N)

Test Method : Reference to APHA 22nd Edition 2012, 4500 N Org.B

Tested Item(s)	Result	Unit	Conclusion
I002	16.3 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 20 mg/L; Progressive Limit: 10 mg/L; Aspirational Limit: 5 mg/L

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pH Value

Test Method : Reference to ALPA 4500-H+B & EPA150.2

-	Unit	Result
Test Item(s)	-	I002
Parameter	-	-
Temp. of sample	deg. C	24
pH value of sample	-	7.3
Conclusion	-	DATA

Note:

Temp. = Temperature deg. C = degree Celsius (°C)
Limit: 6 - 9

Color [m^{-1}] (436nm; 525; 620nm)

Test Method : ISO 7887: 2011(E), B

Tested Item(s)	Parameter	pH	Result	Unit	Conclusion
I002	Trial (λ=436 nm)	7.3	5.1 (Foundational)	m^{-1}	DATA
	Trial (λ=525 nm)	7.3	4.0 (Foundational)	m^{-1}	DATA
	Trial (λ=620 nm)	7.3	2.3 (Foundational)	m^{-1}	DATA

Note:
Foundational Limit: 7;5;3 m^{-1}; Progressive Limit: 5;3;2 m^{-1}; Aspirational Limit: 2;1;1 m^{-1}

Biochemical Oxygen Demand (BOD_5)

Test Method : Reference to APHA 22nd Edition-5210B & ALPA 5210B

Tested Item(s)	Result	Unit	Conclusion
I002	22 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 30 mg/L; Progressive Limit: 15 mg/L; Aspirational Limit: 5 mg/L

Ammonia Nitrogen

Test Method : Reference to APHA 22nd Edition 2012, 4500 NH_3 B.C

Tested Item(s)	Result	Unit	Conclusion
I002	9.0 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 10 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.5 mg/L

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Total Phosphorus (Total-P)

Test Method : Reference to APHA 22nd Edition -4500-P.E (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	0.8807 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 3 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.1 mg/L

Adsorbable Organic Halogen (AOX)

Test Method : Reference to HJ/T 83

Tested Item(s)	Result	Unit	Conclusion
I002	2.0 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 5 mg/L; Progressive Limit: 1 mg/L; Aspirational Limit: 0.1 mg/L

Oil and Grease

Test Method : Reference to APHA 22nd Edition -5520 B (2012)

Tested Item(s)	Result	Unit	Conclusion
I002	7 (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 10 mg/L; Progressive Limit: 2 mg/L; Aspirational Limit: 0.5 mg/L

Phenol

Test Method : Reference to APHA 22nd Edition 2012, USEPA 420.1

Tested Item(s)	Result	Unit	Conclusion
I002	BLQ (LOQ: 0.01) (Progressive)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 0.5 mg/L; Progressive Limit: 0.01 mg/L; Aspirational Limit: 0.001 mg/L

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Coliform

Test Method : Reference to APHA 22nd Edition 2012, 9221 B

Tested Item(s)	Result	Unit	Conclusion
I002	94 (Progressive)	MPN / 100 mL	DATA

Note:

bacteria/100 mL = bacteria per 100 milliliters
Foundational Limit: 400 / 100 ml; Progressive Limit: 100 / 100 ml; Aspirational Limit: 25 / 100 ml;

Foam

Test Method : Visual

Tested Item(s)	Result	Unit	Conclusion
I002	No Foam	-	DATA

ANIONS - Sulfide

Test Method : Reference to APHA 22nd Edition 2012, IS: 3025 Part 29

Tested Item(s)	Result	Unit	Conclusion
I002	BLQ (LOQ: 1.0) (Exceed Foundational Limit)	mg/L	DATA

mg/L = milligram per liter
Foundational Limit: 0.5 mg/L; Progressive Limit: 0.05 mg/L; Aspirational Limit: 0.01 mg/L

ANIONS - Sulfite

Test Method : Reference to APHA 22nd Edition 2012, 4500 SO_3 B

Tested Item(s)	Result	Unit	Conclusion
I002	BLQ (LOQ: 1.0) (Foundational)	mg/L	DATA

Note:

mg/L = milligram per liter
Foundational Limit: 2 mg/L; Progressive Limit: 0.5 mg/L; Aspirational Limit: 0.2 mg/L

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1B) Conventional Parameters – METALS

Heavy Metals	**I001** ***(mg/L)***	**I002** ***(mg/L)***	**I003** ***(mg/kg)***
Antimony(Sb) *Foundational Limit: 0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	N/A
Chromium(Cr), total *Foundational Limit: 0.2 mg/L;* *Progressive Limit: 0.1 mg/L;* *Aspirational Limit: 0.05 mg/L*	ND (Aspirational)	0.039 (Aspirational)	
Cobalt(Co) *Foundational Limit: 0.05 mg/L;* *Progressive Limit: 0.02 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	
Copper(Cu) *Foundational Limit: 1 mg/L;* *Progressive Limit: 0.5 mg/L;* *Aspirational Limit: 0.25 mg/L*	0.054 (Aspirational)	0.019 (Aspirational)	
Nickel (Ni) *Foundational Limit: 0.2 mg/L;* *Progressive Limit: 0.1 mg/L;* *Aspirational Limit: 0.05 mg/L*	ND (Aspirational)	0.010 (Aspirational)	
Silver (Ag) *Foundational Limit: 0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.005 mg/L*	ND (Aspirational)	ND (Aspirational)	
Zinc(Zn) *Foundational Limit: 5 mg/L;* *Progressive Limit: 1 mg/L;* *Aspirational Limit: 0.5 mg/L*	0.005 (Aspirational)	0.012 (Aspirational)	
Arsenic (As) *Foundational Limit: 0.05 mg/L;* *Progressive Limit: 0.01 mg/L;* *Aspirational Limit: 0.005 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Cadmium(Cd) *Foundational Limit: 0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Lead(Pb) *Foundational Limit:0.1 mg/L;* *Progressive Limit: 0.05 mg/L;* *Aspirational Limit: 0.01 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Mercury (Hg) *Foundational Limit: 0.01 mg/L;* *Progressive Limit: 0.005 mg/L;* *Aspirational Limit: 0.001 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Chromium VI(CrVI) *Foundational Limit: 0.05 mg/L;* *Progressive Limit: 0.005 mg/L;* *Aspirational Limit: 0.001 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)
Cyanide(CN-) *Foundational Limit: 0.2 mg/L;* *Progressive Limit: 0.1 mg/L;* *Aspirational Limit: 0.05 mg/L*	ND (Aspirational)	ND (Aspirational)	ND (Aspirational)

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Others Priority Chemical Groups

	I001	I002	I003
2A) APs and APEOs	NT	ND	ND
2B) Chlorobenzenes and Chlorotoluenes	NT	ND	ND
2C) Chlorophenols	NT	ND	ND
2D) Azo Dyes	NT	ND	ND
2E) Carcinogenic Dyes	NT	ND	ND
2F) Disperse Dyes	NT	ND	ND
2G) Flame Retardants	NT	ND	ND
2H) Glycols	NT	ND	ND
2I) Halogenated Solvents	NT	ND	ND
2J) Organotin Compounds	NT	ND	ND
2K) Perfluorinated and Polyfluorinated Chemicals	NT	ND	ND
2L) Phthalates	NT	ND	ND
2M) Poly Aromatic Hydrocarbons	NT	ND	ND
2N) Volatile Organic Compounds	NT	ND	ND

Remark :

- Test method, reporting limit and list of chemical are summarized in tables of Appendix A.
- ND = Not detected (Please refer to reporting limit shown in Appendix A.).
- ppb = part(s) per billion.
- NT = Not Tested

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APPENDIX A

Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg) /(ppm)	
2A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	Octylphenol OP, mixed isomers	Various (incl. 140-66-9, 1806-26-4, 27193-28-8)	5	0.2	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC/MS or LC/MS(-MS) OPEO/NPEO: ISO18857-2 or ASTM D7065(LC/MS; GC/MS or LC/MSMS for n=1,2) APEO 1-18
	Nonylphenol NP	Various (incl. 104-40-5, 11066-49-2, 25154-52-3, 84852-15-3)	5	0.2	
	Nonylphenol Ethoxylates OPEO (2-16)	Various (incl. 9002-93-1, 9036-19-5, 68987-90-6)	5	0.2	
	Nonylphenol Ethoxylates NPEO (2-18)	Various (inc. 9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0)	5	0.2	
2B. Chlorobenzenes and Chlorotoluenes	Chlorobenzene	108-90-7	0.2	0.1	USEPA 8260B,8270D. Dichloromethane extraction followed by GC/MS
	Dichlorobenzene	Various	0.2	0.1	
	Trichlorobenzene	Various	0.2	0.1	
	Tetrachlorobenzene	Various	0.2	0.1	
	1,2-Dichlorobenzene	95-50-1	0.2	0.1	
	1,3-Dichlorobenzene	541-73-1	0.2	0.1	
	1,4-Dichlorobenzene	106-46-7	0.2	0.1	
	1,2,3-Trichlorobenzene	87-61-6	0.2	0.1	
	1,2,4-Trichlorobenzene	120-82-1	0.2	0.1	
	1,3,5-Trichlorobenzene	108-70-3	0.2	0.1	
	1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	0.1	
	1,2,3,5-Tetraclorobenzene	634-90-2	0.2	0.1	
	1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	0.1	
	Pentachlorobenzene	608-93-5	0.2	0.1	
	Hexachlorobenzene	1198-74-1	0.2	0.1	
	2-Chlorotoluene	95-49-8	0.2	0.1	
	3-Chlorotoluene	108-41-8	0.2	0.1	
	4-Chlorotoluene	106-43-4	0.2	0.1	
	2,3-Dichlorotoluene	32768-54-0	0.2	0.1	
	2,4-Dichlorotoluene	95-73-8	0.2	0.1	
	2,5-Dichlorotoluene	19398-61-9	0.2	0.1	
	2,6-Dichlorotoluene	118-69-4	0.2	0.1	
	3,4-Dichlorotoluene	95-75-0	0.2	0.1	
	3,5-Dichlorotoluene	25186-47-4	0.2	0.1	
	2,3,4-Trichlorotoluene	7359-72-0	0.2	0.1	
	2,3,6-Trichlorotoluene	2077-46-5	0.2	0.1	
	2,4,5-Trichlorotoluene	6639-30-1	0.2	0.1	
	2,4,6-Trichlorotoluene	23749-65-7	0.2	0.1	
	3,4,5-Trichlorotoluene	21472-86-6	0.2	0.1	
	2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	0.1	
	2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	0.1	
	2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	0.1	
	Pentachlorotoluene	877-11-2	0.2	0.1	
2C. Chlorophenols	2-Chlorophenol	95-57-8	0.5	0.025	USEPA 8270 D Solvent extraction, derivatisation with
	3-Chlorophenol	108-43-0	0.5	0.025	
	4-Chlorophenol	106-48-9	0.5	0.025	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	2,3-Dichlorophenol	576-24-9	0.5	0.025	KOH, acetic anhydride followed by GC/MS
	2,4-Dichlorophenol	120-83-2	0.5	0.025	
	2,5-Dichlorophenol	583-78-8	0.5	0.025	
	2,6-Dichlorophenol	87-65-0	0.5	0.025	
	3,4-Dichlorophenol	95-77-2	0.5	0.025	
	3,5-Dichlorophenol	591-35-5	0.5	0.025	
	2,3,4-Trichlorophenol	15950-66-0	0.5	0.025	
	2,3,5-Trichlorophenol	933-78-8	0.5	0.025	
	2,3,6-Trichlorophenol	933-75-5	0.5	0.025	
	2,4,5-Trichlorophenol	95-95-4	0.5	0.025	
	2,4,6-Trichlorophenol	88-06-2	0.5	0.025	
	3,4,5-Trichlorophenol	609-19-8	0.5	0.025	
	2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	0.025	
	2,3,4,6-Tetrachlorophenol	58-90-2	0.5	0.025	
	2,3,5,6-Tetrachlorophenol	935-95-5	0.5	0.025	
	Pentachlorophenol (PCP)	87-86-5	0.5	0.025	
	Tetrachlorophenol (TeCP)	Various (incl. 25167-83-3)	0.5	0.025	
2D. Dyes - Azo (Forming Restricted Amines)	4,4`-Methylene-bis-(2-chloro-aniline)	101-14-4	0.1	0.1	EN 14362. Reduction step with Sodiumdithionite, solvent extraction, GC/MS or LC/MS
	4,4'-methylenedianiline	101-77-9	0.1	0.1	
	4,4`-Oxydianiline	101-80-4	0.1	0.1	
	4-Chloroaniline	106-47-8	0.1	0.1	
	3,3`-Dimethoxybenzidine	119-90-4	0.1	0.1	
	3,3`-Dimethylbenzidine	119-93-7	0.1	0.1	
	6-methoxy-m-toluidine (p-Cresidine)	120-71-8	0.1	0.1	
	2,4,5-Trimethylaniline	137-17-7	0.1	0.1	
	4,4`-Thiodianiline	139-65-1	0.1	0.1	
	4-Aminoazobenzene	60-09-3	0.1	0.1	
	4-Methoxy-m-phenylenediamine	615-05-4	0.1	0.1	
	4,4`-Methylene-di-o-toluidine	838-88-0	0.1	0.1	
	2,6-Xylidine	87-62-7	0.1	0.1	
	o-Anisidine	90-04-0	0.1	0.1	
	2-Naphthylamine	91-59-8	0.1	0.1	
	3,3`-Dichlorobenzidine	91-94-1	0.1	0.1	
	4-Aminodiphenyl	92-67-1	0.1	0.1	
	Benzidine	92-87-5	0.1	0.1	
	o-Toluidine	95-53-4	0.1	0.1	
	2,4-Xylidine	95-68-1	0.1	0.1	
	4-Chloro-o-toluidine	95-69-2	0.1	0.1	
	4-Methyl-m-phenylenediamine	95-80-7	0.1	0.1	
	o-Aminoazotoluene	97-56-3	0.1	0.1	
	5-nitro-o-toluidine	99-55-8	0.1	0.1	
2E. Dyes-Carcionogenic or Equivalent Concern	C.I. Direct Black 38	1937-37-7	500	1	Liquid Extraction LC/MS
	C.I. Direct Blue 6	2602-46-2	500	1	
	C.I. Acid Red 26	3761-53-3	500	1	
	C.I. Basic Red 9	569-61-9	500	1	
	C.I. Direct Red 28	573-58-0	500	1	
	C.I. Basic Violet 14	632-99-5	500	1	
	C.I. Disperse Blue 1	2475-45-8	500	1	

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			Wastewater (ug/L)/(ppb)	Sludge (mg/kg) /(ppm)	
	C.I. Disperse Blue 3	2475-46-9	500	1	
	C.I. Basic Blue 26 (withMichler's Ketone > 0.1%)	2580-56-5	500	1	
	C.I. Basic Green 4(malachite green chloride)	569-64-2	500	1	
	C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	1	
	C.I. Basic Green 4(malachite green)	10309-95-2	500	1	
	Disperse Orange 11	82-28-0	500	1	
2F. Dyes-disperse (sensitizing)	Disperse Yellow 1	119-15-3	50	1	Liquid Extraction LC/MS
	Disperse Blue 102	12222-97-8	50	1	
	Disperse Blue 106	12223-01-7	50	1	
	Disperse Yellow 39	12236-29-2	50	1	
	Disperse Orange 37/59/76	13301-61-6	50	1	
	Disperse Brown 1	23355-64-8	50	1	
	Disperse Orange 1	2581-69-3	50	1	
	Disperse Yellow 3	2832-40-8	50	1	
	Disperse Red 11	2872-48-2	50	1	
	Disperse Red 1	2872-52-8	50	1	
	Disperse Red 17	3179-89-3	50	1	
	Disperse Blue 7	3179-90-6	50	1	
	Disperse Blue 26	3860-63-7	50	1	
	Disperse Yellow 49	54824-37-2	50	1	
	Disperse Blue 35	12222-75-2	50	1	
	Disperse Blue 124	61951-51-7	50	1	
	Disperse Yellow 9	6373-73-5	50	1	
	Disperse Orange 3	730-40-5	50	1	
	Disperse Blue 35	56524-77-7	50	1	
2G. Flame Retardants	Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	5	1	ISO 22032, USEPA527 and USEPA8321B. Dichloromethane extraction GC/MS or LC/MS(-MS)
	Decabromodiphenyl ether (DecaBDE)	1163-19-5	5	1	
	Tris(2,3-dibromopropyl) phosphate (TRIS/TDBPP)	126-72-7	5	1	
	Pentabromodiphenyl ether (PentaBDE)	32534-81-9	5	1	
	Octabromodiphenyl ether (OctaBDE)	32536-52-0	5	1	
	Bis(2,3-dibromopropyl) phosphate (BIS/BDBPP)	5412-25-9	5	1	
	Tris(aziridinyl)-phosphineoxide (TEPA)	545-55-1	5	1	
	Polybromobiphenyls (PBBs)	59536-65-1	5	1	
	Tetrabromobisphenol A (TBBPA)	79-94-7	5	1	
	Hexabromocyclododecane (HBCDD)	3194-55-6	5	1	
	2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	5	1	
	Tris(1,3-dichloro-isopropyl) phosphate	13674-87-8	5	1	

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			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	(TDCP)				
	Short chain chlorinated paraffins (SCCPs)	85535-84-8	5	1	
2H. Glycols	Bis(2-methoxyethyl)-ether	111-96-6	50	5	US EPA 8270 Liquid Extraction LC/MS
	2-ethoxyethanol	110-80-5	50	5	
	2-ethoxyethyl acetate	111-15-9	50	5	
	Ethylene glycol dimethyl ether	110-71-4	50	5	
	2-methoxyethanol	109-86-4	50	5	
	2-methoxyethylacetate	110-49-6	50	5	
	2-methoxypropylacetate	70657-70-4	50	5	
	Triethylene glycol dimethyl ether	112-49-2	50	5	
2I. Halogenated Solvents	1,2-Dichloroethane	107-06-2	1	1	USEPA 8260B Headspace GC/MS or Purgeand-Trap-GC/MS
	Methylene Chloride	75-09-2	1	1	
	Trichloroethylene	79-01-6	1	1	
	Tetrachloroethylene	127-18-4	1	1	
2J. Organotin Compounds	Mono-, di- and tri-methyltin derivatives	Various (incl. 993-16-8, 753-73-1, 1066-45-1)	0.01	0.1	ISO 17353 Derivatisation with NaB(C2H5) GC/MS
	Mono-, di- and tri-butyltin derivatives	Various (incl. 78763-54-9, 1118-46-3, 1002-53-5, 683-18-1, 36643-28-4, 56573-85-4, 1461-22-9)	0.01	0.1	
	Mono-, di- and tri-phenyltin derivatives	Various (1124-19-2, 1011-95-6, 6381-06-2, 1135-99-5, 892-20-6, 639-58-7, 668-34-8)	0.01	0.1	
	Mono-, di- and tri-octyltin derivatives	Various (incl. 15231-44-4, 3091-25-6, 94410-05-6, 3542-36-7, 869-59-0, 2587-76-0)	0.01	0.1	
2K. Perfluorinated and Polyfluorinated Chemicals (PFCs)	Perfluorooctanesulfonic acid (PFOS)	355-46-4 ,432-50-7	0.01	0.05	DIN 38407-42 (modified) Ionic PFC: Concentration or direct injection, LC/MS(-MS); Non-ionic PFC (FTOH): derivatisation with acetic anhydride, followed by GC/MS
	Perfluoro-n-octanoic acid (PFOA)	335-67-1/ 335-95-5	0.01	0.05	
	Perfluorobutanesulfonic acid (PFBS)	29420-49-3, 29420-43-3	0.01	0.05	
	Perfluoro-n-hexanoic acid (PFHxA)	307-24-4	0.01	0.05	
	8:2 FTOH	**678-39-7**	**1**	0.5	
	6:2 FTOH	**647-42-7**	**1**	0.5	
2L. Phthalates (including all other esthers of phthalic acid)	Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	1	US EPA 8270D, ISO 18856 Dichloromethane extraction GC/MS
	Dimethoxyethyl phthalate (DMEP)	117-82-8	10	1	
	Di-n-octyl phthalate (DNOP)	117-84-0	10	1	
	Di-iso-decyl phthalate (DIDP)	26761-40-0	10	1	
	Di-iso-nonyl phthalate (DINP)	28553-12-0	10	1	
	Di-n-hexyl phthalate (DnHP)	84-75-3	10	1	
	Dibutyl phthalate (DBP)	84-74-2	10	1	

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Group	Substance (Testing parameter)	CAS No.	Report Limit		Name of the testing method
			Wastewater (ug/L)/(ppb)	Sludge (mg/kg) /(ppm)	
	Butyl benzyl phthalate (BBP)	85-68-7	10	1	
	Dinonyl phthalate (DNP)	84-76-4	10	1	
	Diethyl phthalate (DEP)	84-66-2	10	1	
	Di-n-propyl phthalate (DPRP)	131-16-8	10	1	
	Di-iso-butyl phthalate (DIBP)	84-69-5	10	1	
	Di-cyclohexyl phthalate (DCHP)	84-61-7	10	1	
	Di-iso-octyl phthalate (DIOP)	27554-26-3	10	1	
	1,2-benzenedicarboxylic acid, di-C7-11-branched and linearalkyl esters (DHNUP)	68515-42-4	10	1	
	1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6	10	1	
2M. Poly Aromatic Hydrocarbons (PaHs)	Benzo[a]pyrene (BaP)	50-32-8	1	1	DIN 38407-39 Solvent extraction GC/MS
	Anthracene	120-12-7	1	1	
	Pyrene	129-00-0	1	1	
	Benzo[ghi]perylene	191-24-2	1	1	
	Benzo[e]pyrene	192-97-2	1	1	
	Indeno[1,2,3-cd]pyrene	193-39-5	1	1	
	Benzo[j]fluoranthene	205-82-3	1	1	
	Benzo[b]fluoranthene	205-99-2	1	1	
	Fluoranthene	206-44-0	1	1	
	Benzo[k]fluoranthene	207-08-9	1	1	
	Acenaphthylene	208-96-8	1	1	
	Chrysene	218-01-9	1	1	
	Dibenz[a,h]anthracene	53-70-3	1	1	
	Benzo[a]anthracene	56-55-3	1	1	
	Acenaphthene	83-32-9	1	1	
	Phenanthrene	85-01-8	1	1	
	Fluorene	86-73-7	1	1	
	Naphthalene	91-20-3	1	1	
2N. Volatile Organic Compound (VOCs)	Benzene	71-43-2	1	0.1	ISO 11423-1 Headspace- or Purge-and-Trap-GC/MS
	Xylene	1330-20-7	1	0.1	
	o-cresol	95-48-7	1	0.1	
	p-cresol	106-44-5	1	0.1	
	m-cresol	108-39-4	1	0.1	
1A. Conventional Parameters	Temperature	—	N/A	N/A	Apply the standard methods that best apply to the region (ISO, EU, US, China), please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Exceeded Foundational Limit, Foundational,
	TSS	—	N/A	N/A	
	COD	—	N/A	N/A	
	Total-N	—	N/A	N/A	
	pH	—	N/A	N/A	
	Color [m^{-1}] (436nm; 525nm; 620nm)	—	N/A	N/A	
	BOD5	—	N/A	N/A	
	Ammonium-N	—	N/A	N/A	
	Total-P	—	N/A	N/A	

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			Wastewater (ug/L)/(ppb)	Sludge (mg/kg)/(ppm)	
	AoX	—	N/A	N/A	Progressive, and Aspirational).
	Oil and Grease	—	N/A	N/A	
	Phenol	—	N/A	N/A	
	Coliform(bacteria/100ml)	—	N/A	N/A	
	Persistent Foam	—	Not visible	Not visible	
	ANIONS				
	Sulfide	—	N/A	N/A	
	Sulfite	—	N/A	N/A	

Group	Substance (Testing parameter)	CAS No.	Report Limit		**Name of Testing Method**
			Waste water (mg/L)/(ppm)	**Sludge (mg/kg)/(ppm)**	
1B. Conventional Parameters - **METALS**	Antimony(Sb)	7440-36-0	0.001	N/A	Various Acid Digestion with ICP analysis please refer to ZDHC Wastewater Guidelines for more details on the testing method and the levels (Exceeded Foundational Limit, Foundational, Progressive, and Aspirational).
	Chromium(Cr), total	7440-47-3	0.001	N/A	
	Cobalt(Co)	7440-48-4	0.001	N/A	
	Copper(Cu)	7440-50-8	0.001	N/A	
	Nickel (Ni)	7440-02-0	0.001	N/A	
	Silver (Ag)	7440-22-4	0.001	N/A	
	Zinc(Zn)	7440-66-6	0.001	N/A	
	Arsenic (As)	7440-38-2	0.001	1	
	Cadmium(Cd)	7440-43-9	0.0001	1	
	Lead(Pb)	7439-92-1	0.001	1	
	Mercury (Hg)	7439-97-6	0.00005	0.1	
	Chromium VI(CrVI)	18540-29-9	0.001	1	Various Solvent extraction and derivatisation followed by UV analysis
	Cyanide(CN-)	Various (incl. 57-12-5)	0.02	0.5	With reference to APHA 4500 CN—B,C&E and followed by UV analysis

Note / Key :

ppb = part(s) per billion ; ppm – part(s0 per million
U. S. EPA = United States Environmental Protection Agency
APHA = American Public Health Association

Comment 1: The report [(6817)284-0229] is sub-contracted to BVCPS (Shanghai, China) For Perfluorinated and Polyfluorinated Chemicals, Flame Retardants, Glycols & AOX Test.

Comment 2: The report [(6817)284-0229] is sub-contracted to BVCPS (Chennai, India) For Phenol, Ammonium-N, Total-N, ANIONS – Sulfide, ANIONS – Sulfite & Coliform Test.

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