



LAB REPORT

Report Number	(6824)248-0264		
Date of sampling	September 03, 2024		
Reporting Date	September 14, 2024		
Factory Company Name	South China Bleaching & Dyeing Factory Ltd.		
Factory Address	Plot No.: 93-96 & 109-113, DEPZ, Ganakbari, Savar, Dhaka-1349, Bangladesh.		
Discharge Type	Indirect Discharge without Pretreatment		
Discharge Destination Name & Address	Flagship Dhaka CETP (BD) Ltd. & Plot: 140-147 (Old Zone), Ganakbari, Savar, Dhaka, Bangladesh.		
Average total industrial wastewater generated	Equal or more than 15m ³ per day	Manufacturing Process Type	Textile
Onsite ETP / Pretreatment	No	Homogenization Tank & Holding Time	No
ZDHC Sampler ID	ZDHC-A-24-E-C001068-R418A-0F3A5		
Sample Type & Description & Sampling Method	Untreated wastewater I001, blueish / blackish liquid, composite sample at 08:54, 09:54, 10:54, 11:54, 12:54, 13:54, 14:54		

Local Legal Data / Contractual agree by CETP Data	
Local Legal Standard Name / Name of Contractual agree by CETP^[a]	Environmental Conservation Rules' 2023 (Bangladesh)
Standard Number	S. R. O Number.: 53/Law/2023
Parameters (ZDHC WWG V2.1, Table 2 & 3) exceeded local legal standard / contractual agree by CETP standard	Not Applicable
Discharge permit provided	No

Result Overview			
Wastewater Overall Result (ZDHC WWG V2.1, Table 1)	Not detected		
Wastewater Overall Result (ZDHC WWG V2.1, Table 2 & 3)	Meet Discharge Criteria		
Sludge Disposal Pathway	-	Sludge Overall Result	-



Internal Description	
Sample reference number	(6824)248-0264
Date & time of the beginning of sampling	September 03, 2024 , 08:45
Date & time of the end of sampling	September 03, 2024 , 14:59
Sample received date	September 03, 2024
Testing period	September 03, 2024 to September 14, 2024
Arrival temperature at laboratory	6 °C
Comments	Samples received within holding time and temperature.

The results of this report shall not be used for any regulatory compliance purposes. The sampling is agreed with client. If there are questions or concerns on this report, please contact the following persons:

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Report approved by

MR. MD. RASHEDUL HAQUE
DEPUTY SR. MANAGER, RSL OPERATIONS

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



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Wastewater Result Summary - ZDHC MRSL Parameters

ZDHC MRSL Wastewater	Untreated I001		
1A) AP and APEOs: including all isomers	ND		
1B) Anti-Microbials & Biocides	ND		
1C) Chlorinated Parafins	ND		
1D) Chlorobenzenes and Chlorotoluenes	ND		
1E) Chlorophenols	ND		
1F) DMFa	ND		
1G) Dyes - Carcinogenic or Equivalent Concern	ND		
1H) Dyes - Disperse (Sensitising)	ND		
1I) Dyes - Navy Blue Colourant	ND		
1J) Flame Retardants	ND		
1K) Glycols / Glycol Ethers	ND		
1L) Halogenated Solvents	ND		
1M) Organotin Compounds	ND		
1N) Other / Miscellaneous Chemicals	ND		
1O) PFCs	ND		
1P) Phthalates	ND		
1Q) PAHs	ND		
1R) Restricted Aromatic Amines	ND		
1S) UV Absorbers	ND		
1T) VOC	ND		



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Wastewater Result Summary - ZDHC Heavy Metals Parameters

ZDHC Heavy Metals Wastewater	Untreated I001		
Antimony	NA		
Chromium (VI)	DATA		
Barium	NA		
Selenium	NA		
Tin	NA		
Arsenic	DATA		
Total Chromium	NA		
Cobalt	NA		
Cadmium	MEET		
Copper	NA		
Lead	MEET		
Nickel	NA		
Silver	NA		
Zinc	NA		
Mercury	DATA		



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Wastewater Result Summary - ZDHC Conventional and Anions Parameters

ZDHC Conventional and Anions Wastewater	Effluent		
pH ^[f]	NA		
Temperature difference ^[f]	NA		
E.coli	NA		
Colour	NA		
Persistent foam ^[f]	NA		
Wastewater flowrate ^[f]	NA		
Ammonium-Nitrogen	NA		
AOX	NA		
Biochemical Oxygen Demand (BOD ₅)	NA		
Chemical Oxygen Demand (COD)	NA		
Dissolved Oxygen (DO) ^[f]	NA		
Oil & Grease	NA		
Total Phenols / Phenol Index	NA		
Total Chlorine ^[f]	NA		
Total Dissolved Solids (TDS)	NA		
Total Nitrogen	NA		
Total Phosphorus	NA		
Total Suspended Solids (TSS)	NA		
Chloride	NA		
Cyanide, total	NA		
Sulfate	NA		
Sulfide	NA		
Sulfite	NA		



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Sludge Result Summary - ZDHC Sludge Parameters

Sludge Parameters	Sludge		
Antimony	NA		
Arsenic	NA		
Barium	NA		
Cadmium	NA		
Cobalt	NA		
Copper	NA		
Lead	NA		
Nickel	NA		
Selenium	NA		
Silver	NA		
Total Chromium	NA		
Zinc	NA		
Chromium (VI)	NA		
Mercury	NA		
pH	NA		
% Solids	NA		
Paint Filter Test	NA		
Fecal Coliform	NA		
AP and APEOs: including all isomers	NA		
Polycyclic Aromatic Hydrocarbons (PAHs)	NA		
Chlorotoluenes	NA		
Cyanide	NA		

Sludge flux and/or sludge flow data: NA

Note / Key:

- | | | | | | |
|-----------------|---|---|-----|---|---------------------------|
| ND | = | Not detected (less than reporting limit) | NA | = | Not applicable |
| D | = | Detected | - | = | Did not perform |
| MEET | = | Meet ZDHC Wastewater Guidelines Requirements | [f] | = | Parameter tested in field |
| NOT MEET | = | Not Meet ZDHC Wastewater Guidelines Requirements | | | |
| DATA | = | Report only, refer data | | | |
| (T) | = | Handling temperature exceeded | | | |
| @ | = | Maximum holding time exceeded | | | |
| [a] | = | The local legal standard name and number are referenced to discharge permit (or contractual agree by CETP) that provided by company | | | |
| (S) | = | Analysis was subcontracted for testing - Testtex India Laboratories Pvt. Ltd. | | | |
| * | = | See remark | | | |



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Wastewater Test Result - ZDHC MRSL

1A) AP and APEOs: including all isomers

NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC-MS or LC-MS(-MS), OPEO/NPEO (n>2): ISO 18857-2

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
NPEO	9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	5	ND			µg/L
NP, mixed isomers	104-40-5, 11066-49-2, 25154-52-3, 84852-15-3	5	ND			µg/L
OPEO	9002-93-1, 9036-19-5, 68987-90-6	5	ND			µg/L
OP, mixed isomers	140-66-9, 1806-26-4, 27193-28-8	5	ND			µg/L

1B) Anti-Microbials & Biocides

USEPA 8270E Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC-MS BS EN 12673-1999 (o-Phenylphenol & Triclosan) and USEPA 8270E Solvent extraction followed by GC-MS or ISO 14154:2005 (Permethrin)

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
o-Phenylphenol (+salts)	90-43-7	100	ND			µg/L
Triclosan	3380-34-5	100	ND			µg/L
Permethrin	Multiple	500	ND			µg/L

1C) Chlorinated Parafins

EPA 3510 and analyzed by ISO18219-2:2021 Method for MCCP with GC-MS(NCI) or LC-MS/MS for MCCP & EPA 3510 and analyzed by ISO18219-1:2021, ISO 12010:2019 Methods for SCCP with GC-MS(NCI)

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
MCCPs (C14-C17)	85535-85-9	500	ND			µg/L
SCCPs (C10-C13)	85535-84-8	25	ND			µg/L

1D) Chlorobenzenes and Chlorotoluenes

USEPA 8260D, 8270E, Purge and Trap, Head Space, Dichloromethane extraction followed by GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
1,2-dichlorobenzene	95-50-1	0.2	ND			µg/L
Other isomers of mono-, di-, tri-, tetra-, penta-, and hexa-chlorobenzene and mono-, di-, tri-, tetra-, and penta- chlorotoluene	Multiple	0.2	ND			µg/L



1E) Chlorophenols

USEPA 8270E Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC-MS, BS EN 12673-1999 the procedure of solvent extraction and derivatization are included

Table with 7 columns: Test Parameters, CAS Number, Reporting limit & LOQ, Result of Test Items (Untreated I001), Unit. Lists 20 types of chlorophenols with their respective CAS numbers and reporting limits.

1F) N,N-di-methylformamide (DMFa)

EPA 8015, EPA 8270E

Table with 6 columns: Test Parameters, CAS Number, Reporting limit & LOQ, Result of Test Items (Untreated I001), Unit. Lists Dimethyl formamide; N,N-dimethylformamide (DMFa) with CAS number 68-12-2 and a reporting limit of 1000.

1G) Dyes - Carcinogenic or Equivalent Concern

Liquid extraction, LC-MS

Table with 7 columns: Test Parameters, CAS Number, Reporting limit & LOQ, Result of Test Items (Untreated I001), Unit. Lists 5 types of dyes: Basic violet 3, C.I. Acid Red 26, C.I. Acid Violet 49, C.I. Basic Blue 26, and C.I. Basic Green 4.



1G) Dyes - Carcinogenic or Equivalent Concern (continued)

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
C.I. Basic Green 4 (Malachite Green Oxalate)	2437-29-8	500	ND			µg/L
C.I. Basic Green 4 (Malachite Green)	10309-95-2	500	ND			µg/L
C.I. Basic Red 9	569-61-9	500	ND			µg/L
C.I. Basic Violet 14	632-99-5	500	ND			µg/L
C.I. Direct Black 38	1937-37-7	500	ND			µg/L
C.I. Direct Blue 6	2602-46-2	500	ND			µg/L
C.I. Direct Red 28	573-58-0	500	ND			µg/L
C.I. Disperse Blue 1	2475-45-8	500	ND			µg/L
C.I. Disperse Blue 3	2475-46-9	500	ND			µg/L
Disperse Orange 11	82-28-0	500	ND			µg/L

1H) Dyes - Disperse (Sensitising)

Liquid extraction, LC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Disperse Blue 102	12222-97-8	50	ND			µg/L
Disperse Blue 106	12223-01-7	50	ND			µg/L
Disperse Blue 124	61951-51-7	50	ND			µg/L
Disperse Blue 26	3860-63-7	50	ND			µg/L
Disperse Blue 35 (CAS 12222-75-2)	12222-75-2	50	ND			µg/L
Disperse Blue 35 (CAS 56524-77-7)	56524-77-7	50	ND			µg/L
Disperse Blue 7	3179-90-6	50	ND			µg/L
Disperse Brown 1	23355-64-8	50	ND			µg/L
Disperse Orange 1	2581-69-3	50	ND			µg/L
Disperse Orange 3	730-40-5	50	ND			µg/L
Disperse Orange 37/59/76	13301-61-6	50	ND			µg/L
Disperse Red 1	2872-52-8	50	ND			µg/L
Disperse Red 11	2872-48-2	50	ND			µg/L
Disperse Red 17	3179-89-3	50	ND			µg/L
Disperse Yellow 1	119-15-3	50	ND			µg/L
Disperse Yellow 3	2832-40-8	50	ND			µg/L
Disperse Yellow 39	12236-29-2	50	ND			µg/L
Disperse Yellow 49	54824-37-2	50	ND			µg/L
Disperse Yellow 9	6373-73-5	50	ND			µg/L



1I) Dyes - Navy Blue Colourant

Liquid extraction, LC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Component 1: C39H23Cl-CrN7O12S 2Na	118685-33-9	500	ND			µg/L
Component 2: C46H-30CrN10O20S2 3Na	Not allocated	500	ND			µg/L

1J) Flame Retardants

ISO 22032, USEPA 527 and USEPA 8321B Dichloromethane extraction GC-MS or LC-MS & Determined as total boron via ICP

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	25	ND			µg/L
Bis(2,3-dibromopropyl) phosphate (BIS)	5412-25-9	25	ND			µg/L
Decabromophenyl ether (DecaBDE)	1163-19-5	25	ND			µg/L
Hexabromocyclodecane (HBCDD)	3194-55-6	25	ND			µg/L
Octabromodiphenyl ether (OctaBDE)	32536-52-0	25	ND			µg/L
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	25	ND			µg/L
Polybromobiphenyls (PBB)	59536-65-1	25	ND			µg/L
Tetrabromobisphenol A (TBBPA)	79-94-7	25	ND			µg/L
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	25	ND			µg/L
Tris(1-aziridinyl)phosphone oxide (TEPA)	545-55-1	25	ND			µg/L
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	25	ND			µg/L
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	25	ND			µg/L
Tris(2,3-dibromopropyl) phosphate (TRIS)	126-72-7	25	ND			µg/L
Decabromobiphenyl (DecaBB)	13654-09-6	25	ND			µg/L
Dibromobiphenyls (DiBB)	Multiple	25	ND			µg/L
Octabromobiphenyls (OctaBB)	Multiple	25	ND			µg/L
Dibromopropylether	21850-44-2	25	ND			µg/L
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	25	ND			µg/L
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	25	ND			µg/L
Monobromobiphenyls (MonoBB)	Multiple	25	ND			µg/L



1J) Flame Retardants (continued)

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Monobromodiphenylethers (MonoBDEs)	Multiple	25	ND			µg/L
Nonabromobiphenyls (NonaBB)	Multiple	25	ND			µg/L
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	25	ND			µg/L
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	25	ND			µg/L
Tribromophenylethers (TriBDEs)	Multiple	25	ND			µg/L
Boric acid ^b	10043-35-3, 11113-50-1	100	ND			µg/L
Diboron trioxide ^b	1303-86-2	100	ND			µg/L
Disodium octaborate ^b	12008-41-2	100	ND			µg/L
Disodium tetraborate anhydrous ^b	1303-96-4, 1330-43-4	100	ND			µg/L
Tetraboron disodium heptaoxide, hydrate ^b	12267-73-1	100	ND			µg/L

1K) Glycols / Glycol Ethers

USEPA 8270E Liquid extraction, GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
2-ethoxyethanol	110-80-5	50	ND			µg/L
2-ethoxyethyl acetate	111-15-9	50	ND			µg/L
2-methoxyethanol	109-86-4	50	ND			µg/L
2-methoxyethylacetate	110-49-6	50	ND			µg/L
2-methoxypropylacetate	70657-70-4	50	ND			µg/L
Bis(2-methoxyethyl)-ether	111-96-6	50	ND			µg/L
Ethylene glycol dimethyl ether	110-71-4	50	ND			µg/L
Triethylene glycol dimethyl ether	112-49-2	50	ND			µg/L

1L) Halogenated Solvents

USEPA 8260D Headspace GC-MS or Purge and trap GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
1,2-dichloroethane	107-06-2	1	ND			µg/L
Methylene chloride	75-09-2	1	ND			µg/L
Tetrachloroethylene	127-18-4	1	ND			µg/L
Trichloroethylene	79-01-6	1	ND			µg/L



1M) Organotin Compounds

ISO 17353 Derivatisation with NaB (C₂H₅)₄ GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Dipropyltin compounds (DPT)	Multiple	0.01	ND			µg/L
Mono, di-, and tri-butyltin derivatives	Multiple	0.01	ND			µg/L
Mono, di-, and tri-methyltin derivatives	Multiple	0.01	ND			µg/L
Mono, di-, and tri-octyltin derivatives	Multiple	0.01	ND			µg/L
Mono, di-, and tri-phenyltin derivatives	Multiple	0.01	ND			µg/L
Tetrabutyltin compounds (TeBT)	Multiple	0.01	ND			µg/L
Tripropyltin compounds (TPT)	Multiple	0.01	ND			µg/L
Tetraoctyltin compounds (TeOT)	Multiple	0.01	ND			µg/L
Tricyclohexyltin (TCyHT)	Multiple	0.01	ND			µg/L
Tetraethyltin compounds (TeET)	Multiple	0.01	ND			µg/L

1N) Other / Miscellaneous Chemicals

Liquid extraction, LC-MS; Determine as total boron and total zinc via ICP

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
AEEA [2-(2-aminoethylamino)ethanol]	111-41-1	500	ND			µg/L
Bisphenol A	80-05-7	10	ND			µg/L
Thiourea	62-56-6	50	ND			µg/L
Quinoline	91-22-5	50	ND			µg/L
Borate (Borate, zinc salt ^c)	12767-90-7	100	ND			µg/L
Zinc salt (Borate, zinc salt ^c)		100	ND			µg/L
Silica (used in sand blasting) ^d	14464-46-1	-	NA			µg/L

1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)

PFCs: EPA 537:2020; FTOH: BS EN 12673-1999, EPA 8270; PFCs: LC-MSMS

FTOH: GC-MS Derivatisation with acetic anhydride followed by GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA)	Multiple	0.01	ND			µg/L
Perfluorooctanoic acid (PFOA) related substances	Multiple	1	ND			µg/L



1P) Phthalates - including all other esters of ortho-phthalic acid

USEPA 8270E, ISO 18856 Dichloromethane extraction GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP)	71888-89-6, 84777-06-0	10	ND			µg/L
1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)	68515-42-4, 68515-50-4	10	ND			µg/L
Bis(2-methoxyethyl)phthalate (DMEP)	117-82-8	10	ND			µg/L
Butyl benzyl phthalate (BBP)	85-68-7	10	ND			µg/L
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	ND			µg/L
Di-iso-decyl phthalate (DIDP)	26761-40-0	10	ND			µg/L
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	ND			µg/L
Di-iso-butyl phthalate (DIBP)	84-69-5	10	ND			µg/L
Di-iso-nonyl phthalate (DINP)	28553-12-0	10	ND			µg/L
Di-n-hexyl phthalate (DnHP)	84-75-3	10	ND			µg/L
Di-n-octyl phthalate (DNOP)	117-84-0	10	ND			µg/L
Di-n-pentylphthalates	131-18-0	10	ND			µg/L
Di-n-propyl phthalate (DPRP)	131-16-8	10	ND			µg/L
Di(ethylhexyl) phthalate (DEHP)	117-81-7	10	ND			µg/L
Dibutyl phthalate (DBP)	84-74-2	10	ND			µg/L
Diethyl phthalate (DEP)	84-66-2	10	ND			µg/L
Diisopentylphthalates	605-50-5	10	ND			µg/L
Dinonyl phthalate (DNP)	84-76-4	10	ND			µg/L

1Q) Polycyclic Aromatic Hydrocarbons (PAHs)

USEPA 8270E DIN 38407-39 Solvent extraction GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Acenaphthene	83-32-9	1	ND			µg/L
Acenaphthylene	208-96-8	1	ND			µg/L
Anthracene	120-12-7	1	ND			µg/L
Benzo[a]anthracene	56-55-3	1	ND			µg/L
Benzo[a]pyrene (BaP)	50-32-8	1	ND			µg/L
Benzo[b]fluoranthene	205-99-2	1	ND			µg/L
Benzo[e]pyrene	192-97-2	1	ND			µg/L
Benzo[ghi]perylene	191-24-2	1	ND			µg/L
Benzo[j]fluoranthene	205-82-3	1	ND			µg/L
Benzo[k]fluoranthene	207-08-9	1	ND			µg/L
Chrysene	218-01-9	1	ND			µg/L
Dibenz[a,h]anthracene	53-70-3	1	ND			µg/L



1Q) Polycyclic Aromatic Hydrocarbons (PAHs) (continued)

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Fluoranthene	206-44-0	1	ND			µg/L
Fluorene	86-73-7	1	ND			µg/L
Indeno[1,2,3-cd]pyrene	193-39-5	1	ND			µg/L
Naphthalene	91-20-3	1	ND			µg/L
Phenanthrene	85-01-8	1	ND			µg/L
Pyrene	129-00-0	1	ND			µg/L

1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)

Reduction step with sodium dithionite, solvent extraction EPA 8270 & Reduction step with sodium dithionite, solvent extraction EPA 8270E and ISO 14362-1 GC/MS and LC/DAD

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
2-naphthylamine	91-59-8	0.1	ND			µg/L
2-naphthylammoniumacetate	553-00-4	0.1	ND			µg/L
2,4-xylidine	95-68-1	0.1	ND			µg/L
2,4,5-trimethylaniline	137-17-7	0.1	ND			µg/L
2,4,5-trimethylaniline hydrochloride	21436-97-5	0.1	ND			µg/L
2,6-xylidine	87-62-7	0.1	ND			µg/L
3,3'-dichlorobenzidine	91-94-1	0.1	ND			µg/L
3,3-dimethoxybenzidine	119-90-4	0.1	ND			µg/L
3,3-dimethylbenzidine	119-93-7	0.1	ND			µg/L
4-aminoazobenzene	60-09-3	0.1	ND			µg/L
4-aminodiphenyl	92-67-1	0.1	ND			µg/L
4-chloro-o-toluidine	95-69-2	0.1	ND			µg/L
4-chloro-o-toluidinium chloride	3165-93-3	0.1	ND			µg/L
4-chloroaniline	106-47-8	0.1	ND			µg/L
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisoole sulphate	39156-41-7	0.1	ND			µg/L
4-methoxy-m-phenylenediamine	615-05-4	0.1	ND			µg/L
4-methyl-m-phenylenediamine	95-80-7	0.1	ND			µg/L
4,4-methylene-bis-(2-chloro-aniline)	101-14-4	0.1	ND			µg/L
4,4-methylenedi-o-toluidine	838-88-0	0.1	ND			µg/L
4,4-methylenedianiline	101-77-9	0.1	ND			µg/L
4,4-oxydianiline	101-80-4	0.1	ND			µg/L
4,4-thiodianiline	139-65-1	0.1	ND			µg/L
5-nitro-o-toluidine	99-55-8	0.1	ND			µg/L
6-methoxy-m-toluidine	120-71-8	0.1	ND			µg/L
Benzidine	92-87-5	0.1	ND			µg/L
o-aminoazotoluene	97-56-3	0.1	ND			µg/L
o-anisidine	90-04-0	0.1	ND			µg/L
o-toluidine	95-53-4	0.1	ND			µg/L



1S) UV Absorbers

USEPA 8270 ISO 22032, USEPA 527 and USEPA 8321B. Dichloromethane extraction GC-MS

Table with 7 columns: Test Parameters, CAS Number, Reporting limit & LOQ, Result of Test Items (Untreated I001), Unit. Rows include 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350), 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328), 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320), and 2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327).

1T) Volatile Organic Compounds (VOC)

ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D Static headspace for determination of VOC in wastewater; ISO 11423-1 Headspace or Purge and trap GC-MS EPA 8270; ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D & EPA 8260D or ISO 11423-1

Table with 7 columns: Test Parameters, CAS Number, Reporting limit & LOQ, Result of Test Items (Untreated I001), Unit. Rows include Benzene, m-cresol, o-cresol, p-cresol, Xylene, and Toluene^a.

Note / Key:

- a = Sample and report only for mock leather.
b = Limit refers to elemental boron, not the salt.
c = Limit refers to total boron and total zinc individually, not the salt. Total boron and total zinc values should be less than 100 µg/L to be conformant. When total boron is >100 µg/L and total zinc are <100 µg/L (or vice versa) the sample is still conformant.
d = Not required to test this parameter as this related to sand blasting.



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Wastewater Test Result - ZDHC Heavy Metals

Wastewater - ZDHC Heavy Metals

With reference to EPA 3015A, 6020A, 200.8, 6020B, 3051A and ISO 17294-2 and analyzed by ICP-MS and ISO 18412 / USEPA 218.6 for Chromium (VI)

Test Parameters	Reporting limit & LOQ	Limit				Result of Test Items			Unit
		Foundational	Progressive	Aspirational	Local Legal Standard / Contractual agree with CETP Standard	Untreated			
Antimony	0.01	0.1	0.05	0.01	--	NA			mg/L
Chromium (VI)	0.001	0.05	0.005	0.001	--	ND			mg/L
Barium	1	Sample & Report			--	NA			mg/L
Selenium	1	Sample & Report			--	NA			mg/L
Tin	1	Sample & Report			--	NA			mg/L
Arsenic	0.005	0.05	0.01	0.005	--	ND			mg/L
Total Chromium	0.05	0.2	0.1	0.05	0.5	NA			mg/L
Cobalt	0.01	0.05	0.02	0.01	0.5	NA			mg/L
Cadmium	0.01	0.1	0.05	0.01	0.02	ND			mg/L
Copper	0.25	1	0.5	0.25	--	NA			mg/L
Lead	0.01	0.1	0.05	0.01	0.1	0.014			mg/L
Nickel	0.05	0.2	0.1	0.05	1	NA			mg/L
Silver	0.005	0.1	0.050	0.005	--	NA			mg/L
Zinc	0.5	5	1	0.5	--	NA			mg/L
Mercury	0.001	0.01	0.005	0.001	--	ND			mg/L



Wastewater Test Result - ZDHC Conventional & Anions

Wastewater - ZDHC Conventional									
Test Parameters	Test Method	Reporting limit & LOQ	Limit				Result of Test Items		Unit
			Foundational	Progressive	Aspirational	Local Legal Standard / Contractual agree with CETP Standard	Effluent		
pH ^[f]	ISO 10523, EPA 150.2 & APHA 4500-H+	-	6-9	6-9	6-9	6-9	NA		-
Temperature difference ^[f]	USEPA 170.1 or GB/T 13195	-	15	10	5	≤5	NA		Δ °C
E.coli	APHA 9221 B,F	126	126	126	126	--	NA		MPN/100-ml
Colour (436 nm)	ISO 7887: 2011(E), B	2	7	5	2	--	NA		m ⁻¹
Colour (525 nm)		1	5	3	1	--	NA		m ⁻¹
Colour (620 nm)		1	3	2	1	--	NA		m ⁻¹
Persistent Foam ^[f]	Visual	-	No indication of Persistent Foam			--	NA		-
Wastewater Flowrate ^[f]	-	-	-	-	-	--	NA		m ³ /day
Ammonium-Nitrogen	APHA-4500-NH ₃ B&F	0.5	10	1	0.5	--	NA		mg/L
AOX	EN ISO 9562 (Mod.)	0.1	3	0.5	0.1	--	NA		mg/L
BOD ₅	APHA 5210B & HJ 505 (5 days)	8	30	15	8	30	NA		mg/L
COD	APHA 5220 D	40	150	80	40	200	NA		mg/L
DO ^[f]	Hach manual for LDO & In-house	-	Sample & Report	Sample & Report	Sample & Report	--	NA		mg/L
Oil & Grease	EPA 1664B & APHA 5520 B and F	0.5	10	2	0.5	10	NA		mg/L
Total Phenols / Phenol Index	APHA 5530 C	0.001	0.5	0.01	0.001	1	NA		mg/L
Total Chlorine ^[f]	ISO 7393-2, EPA 330.5 or HJ 586	0.1	Sample & Report	Sample & Report	Sample & Report	--	NA		mg/L
TDS	APHA 2540C	5	Sample & Report	Sample & Report	Sample & Report	2100	NA		mg/L
Total Nitrogen	APHA 4500 N-C	5	20	10	5	--	NA		mg/L
Total Phosphorus	APHA 4500-P; E	0.1	3	0.5	0.1	--	NA		mg/L
TSS	APHA 2540D, GB 11901, ISO 11923	5	50	15	5	100	NA		mg/L



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Wastewater Test Result - ZDHC Conventional & Anions

Wastewater - ZDHC Anions									
Test Parameters	Test Method	Reporting limit & LOQ	Limit				Result of Test Items		Unit
			Foundational	Progressive	Aspirational	Local Legal Standard / Contractual agree with CERP Standard	Effluent		
Chloride	APHA 4500-CI	1	Sample & Report	Sample & Report	Sample & Report	--	NA		mg/L
Cyanide, total	APHA-4500-CN, C&E, EPA 9010C, 9013 & 9014	0.05	0.2	0.1	0.05	--	NA		mg/L
Sulfate	APHA 4500-SO4-E	3	Sample & Report	Sample & Report	Sample & Report	--	NA		mg/L
Sulfide	APHA 4500-S2-D	0.01	0.5	0.05	0.01	2	NA		mg/L
Sulfite	EPA 377.1 & APHA 4500-SO3 2-B	0.2	2	0.5	0.2	--	NA		mg/L



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Sludge Test Result - Metals & Conventional and Anions & MRSL

Sludge - Metals

With reference to EPA 3015A, 6020A, 200.8, 6020B, 3051A and ISO 17294-2 and analyzed by ICP-MS and ISO 18412 / USEPA 218.6 for Chromium (VI)

Test Parameters	Sludge Reporting limit & LOQ	Total Metals and Anions Threshold Values	Limit		Result of Test Items			Unit
					Sludge			
Antimony	5	12			NA			mg/kg
Arsenic	5	10			NA			mg/kg
Barium	200	700			NA			mg/kg
Cadmium	1	3			NA			mg/kg
Cobalt	400	1600			NA			mg/kg
Copper	50	200			NA			mg/kg
Lead	5	10			NA			mg/kg
Nickel	20	70			NA			mg/kg
Selenium	5	10			NA			mg/kg
Silver	50	100			NA			mg/kg
Total Chromium	50	100			NA			mg/kg
Zinc	400	1000			NA			mg/kg
Chromium (VI)	20	50			NA			mg/kg
Mercury	1	1			NA			mg/kg

Sludge (Leachate) - Metals

With reference to EPA 1311 for leachate

Test Parameters	Reporting limit & LOQ	Leachate Limit	Limit		Result of Test Items			Unit
					Leachate			
Antimony	0.6	-			NA			mg/L
Arsenic	0.5				NA			mg/L
Barium	35				NA			mg/L
Cadmium	0.15				NA			mg/L
Cobalt	80				NA			mg/L
Copper	10				NA			mg/L
Lead	0.5				NA			mg/L
Nickel	3.5				NA			mg/L
Selenium	0.5				NA			mg/L
Silver	5				NA			mg/L
Total Chromium	5				NA			mg/L
Zinc	50				NA			mg/L
Chromium (VI)	2.5				NA			mg/L
Mercury	0.05				NA			mg/L



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Sludge - Conventional

Test Parameters	Test Method	Reporting limit & LOQ	Limit		Result of Test Items			Unit
			Sludge Reporting Limit	Limits for specific disposal pathway	Sludge			
pH	EPA SW 9045D	-	-	-	NA			-
% Solids	EPA 160.3, HJ613 at 105 degree C	-	-		NA			%
Fecal Coliform	APHA 9221. A, E	-	-		NA			MPN/100 ml
Paint Filter Test	EPA 9095B	-	-		NA			-

Sludge - AP and APEOs: including all isomers

NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC-MS or LC-MS(-MS), OPEO/NPEO (n>2): ISO 18857-2

Test Parameters	CAS Number	Limit		Result of Test Items			Unit
		Sludge Reporting Limit & LOQ	Limits for specific disposal pathway	Sludge			
NPEO	9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	0.4	-	NA			mg/kg
NP, mixed isomers	104-40-5, 11066-49-2, 25154-52-3, 84852-15-3			NA			mg/kg
OPEO	9002-93-1, 9036-19-5, 68987-90-6			NA			mg/kg
OP, mixed isomers	140-66-9, 1806-26-4, 27193-28-8			NA			mg/kg

Sludge - Chlorotoluenes

USEPA 8260D, 8270E, Purge and Trap, Head Space, Dichloromethane extraction followed by GC-MS

Test Parameters	CAS Number	Limit		Result of Test Items			Unit
		Sludge Reporting Limit & LOQ	Limits for specific disposal pathway	Sludge			
Chlorotoluenes	Multiple	0.2	-	NA			mg/kg



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Sludge - Polycyclic Aromatic Hydrocarbons (PAHs)

USEPA 8270E DIN 38407-39 Solvent extraction GC-MS

Test Parameters	CAS Number	Limit		Result of Test Items			Unit
		Sludge Reporting Limit & LOQ	Limits for specific disposal pathway	Sludge			
Acenaphthene	83-32-9	0.2	-	NA			mg/kg
Acenaphthylene	208-96-8			NA			mg/kg
Anthracene	120-12-7			NA			mg/kg
Benzo[a]anthracene	56-55-3			NA			mg/kg
Benzo[a]pyrene (BaP)	50-32-8			NA			mg/kg
Benzo[b]fluoranthene	205-99-2			NA			mg/kg
Benzo[e]pyrene	192-97-2			NA			mg/kg
Benzo[ghi]perylene	191-24-2			NA			mg/kg
Benzo[j]fluoranthene	205-82-3			NA			mg/kg
Benzo[k]fluoranthene	207-08-9			NA			mg/kg
Chrysene	218-01-9			NA			mg/kg
Dibenz[a,h]anthracene	53-70-3			NA			mg/kg
Fluoranthene	206-44-0			NA			mg/kg
Fluorene	86-73-7			NA			mg/kg
Indeno[1,2,3-cd]pyrene	193-39-5			NA			mg/kg
Naphthalene	91-20-3			NA			mg/kg
Phenanthrene	85-01-8			NA			mg/kg
Pyrene	129-00-0			NA			mg/kg

Sludge - Anions

APHA-4500-CN. C&E, EPA 9010C, 9013 & 9014

Test Parameters	Limit			Result of Test Items			Unit
	Sludge Reporting Limit & LOQ	Limits for specific disposal pathway		Sludge			
Cyanide	20	-		NA			mg/kg



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Appendix A - Discharge limit according to regulation

[Environmental Conservation Rules' 2023 (Bangladesh): For Dyeing / Washing and Printing [Schedule 5 (2)]:

Sl No.	Test Parameters	unit	Limitation Value of Legal Requirements (ECR)
1	Temperature	°C	≤5
2	TSS	mg/L	100
3	COD	mg/L	200
4	pH	Range	6-9
5	Color	Pt-Co	150
6	BOD5	mg/L	30
7	Oil and Grease	mg/L	10
8	Phenol / Phenol Index	mg/L	1
9	Sulfide	mg/L	2
10	Total Dissolved Solids	mg/L	2100
11	Chromium, total	mg/L	0.5
12	Cobalt	mg/L	0.5
13	Nickel	mg/L	1
14	Cadmium	mg/L	0.02
15	Lead	mg/L	0.1



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Appendix B - Photos of sampling points and samples (with relative time and date)

I001 - Untreated wastewater

Sampling point
03/09/2024; 09:54



Sampling point surrounding environment
03/09/2024; 09:55



Labelled sample bottles
03/09/2024; 14:51



Sample for phthalate test
03/09/2024; 14:52



Sample packaging
03/09/2024; 14:57





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Appendix C - On-site Field Data Record Sheet

ZDHC Wastewater Sampling Field Data Form and Representative Sample Declaration		CPSD-AN-00613-DATA 07	
		Issue Date: February 20, 2024	
		Version No.: 1	
		Business Line: Analytical	
Facility Information			
Date of Sampling:	03.09.2024		
Sample Number (ZDHC Composite Sample Code):			
Facility Name:	South China Bleaching & Dyeing Factory Ltd.		
Facility Address:	Plot No. 93-96/09, 112, DEPR, SARETS, Dhaka, Bangladesh		
Facility Type (tick all applicable):	<input checked="" type="checkbox"/> Dyeing and Finishing <input checked="" type="checkbox"/> Laundry, Washing and Finishing <input checked="" type="checkbox"/> Printing <input type="checkbox"/> Other (please specify): <input type="checkbox"/> Fabric Mill <input type="checkbox"/> Natural leather processing <input type="checkbox"/> Synthetic leather processing		
Discharge Type (tick applicable):	<input type="checkbox"/> Direct discharge <input checked="" type="checkbox"/> Indirect discharge <input type="checkbox"/> Zero liquid discharge (ZLD) <input type="checkbox"/> with pre-treatment <input checked="" type="checkbox"/> without pre-treatment <input type="checkbox"/> with own ETP		
Discharge Description:	<input type="checkbox"/> Discharge to environment (e.g. river, stream, sea etc.) <input type="checkbox"/> Sewage treatment plant <input checked="" type="checkbox"/> Other (please specify): Flagship Dhaka (CEP) Bangladesh Ltd. pipe		
Discharge Volume:	<input checked="" type="checkbox"/> ≥ 15m ³ per day <input type="checkbox"/> < 15m ³ per day		
Sample Type and Details			
Sample Type:	Sample Details		
Incoming Water:			
<input checked="" type="checkbox"/> Sanitized WW	<input type="checkbox"/> With equalisation tank (EQT) present Hydraulic Retention Time (HRT) (hours): <u><12</u> <small>(If equalised tank (m³) / flow rate (m³/h) if HRT > 12 h, grab sampling from EQT is allowed)</small>		
Effluent:	<input type="checkbox"/> Direct <input type="checkbox"/> Indirect <input type="checkbox"/> Facility has WWTP <input type="checkbox"/> Plant is in operating condition <input type="checkbox"/> with equalisation tank (EQT) present Hydraulic Retention Time (HRT) (Hours): <small>= volume of tank (m³) / flow rate (m³/h) If HRT > 12 h, grab sampling from EQT is allowed.</small>		
Sludge type:	<input type="checkbox"/> A: 1000°C offsite incineration <input type="checkbox"/> B: Landfill with significant control <input type="checkbox"/> C: Building products processed >1000°C <input type="checkbox"/> D: Landfill with limited control <input type="checkbox"/> E: Incineration/ Building products processed <1000°C <input type="checkbox"/> F: Landfill with no control <input type="checkbox"/> G: Land application Sludge flux (weight/time) if applicable:		
ZDHC Wastewater Sampling - Facility Confirmation			
<small>The wastewater samples have been collected under the facilities' normal production scale and wastewater flow rate. The sampler listed below was on-site and collected the samples. Sampling protocol for wastewater and sludge samples are in accordance with ZDHC SAP including appendix E. Wastewater and sludge samples be taken during times when the production process is not running or the wastewater is diluted, for example due to heavy rain.</small>			
Facility Confirmation		Sampler Information	
Facility Name:	South China Bleaching & Dyeing Factory Ltd.	Sampler's Name/Email:	Ms. Hasnaen
Facility Representative Name:	S.M. Abu Sayed	Sampler's ZDHC Accredited No.:	ZDHC-A-24-E-001068 RA18A-0F3A5
Facility Representative Signature and Stamp:		Sampler's Signature:	
Date:	03/09/24	Date:	03.09.2024



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Appendix C - On-site Field Data Record Sheet (continued)

ZDHC Wastewater Flow Device Dimensions									
Measurement (cm)	Meter		Pipe (O)		Flume (U)		Wier (V)		
Diameter	--		--		--		--		
Depth	--		--		--		--		
ZDHC Wastewater Sampling Field Testing QA/ QC									
Parameter	Lab Control Sample (LCS) Known			Lab Control Sample (LCS) Measured			Accuracy (%)		
pH									
Total Chlorine									
ZDHC Wastewater Sample Collection Field Test Measurements									
Incoming Sample Point		<input type="radio"/> Composite Sample		<input type="radio"/> Grab Sample		Start Time:		Stop Time:	
Sampling Locations:		GPS coordinates:				Lat.: N / S		Long: E / W	
Sampling Mode:		<input type="radio"/> Manual		<input type="radio"/> Autosampler - Sampling Device Description/ Owner:					
Sampling Time (hours)		0	1	2	3	4	5	6	Average
Recording time of discrete sample									--
Colour (visual estimation)									
Untreated Sample Point		<input checked="" type="radio"/> Composite Sample		<input type="radio"/> Grab Sample		Start Time: 8.45		Stop Time: 14.50	
Sampling Locations:		GPS coordinates:				Lat.: N / S 23.0992		Long: E / W 90.2661	
Sampling Mode:		<input checked="" type="radio"/> Manual		<input type="radio"/> Autosampler - Sampling Device Description/ Owner:					
Sampling Time (hours)		0	1	2	3	4	5	6	Average
Recording time of discrete sample		8.54	9.54	10.54	11.54	12.54	13.54	14.54	--
Colour (visual estimation)		Blackish	Blackish	Bluish	Blackish	Bluish	Blackish	Blackish	
Effluent Sample Point		<input type="radio"/> Composite Sample		<input type="radio"/> Grab Sample		Start Time:		Stop Time:	
Sampling Locations:		GPS coordinates:				Lat.: N / S		Long: E / W	
Sampling Mode:		<input type="radio"/> Manual		<input type="radio"/> Autosampler - Sampling Device Description/ Owner:					
Sampling Time (hours)		0	1	2	3	4	5	6	Average
Recording time of discrete sample									--
Effluent Type (C):		<input type="checkbox"/> WW Discharge		<input type="checkbox"/> Receiving Water					
pH									
Dissolved Oxygen (mg/L)									
Total Chlorine (mg/L)									
Dissolved Lead (Yes/No)		Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
Wastewater Flow Meter (L/min)									
Temperature Measured		Depth (cm)							
Flow		Velocity (cm/sec)							
Colour (visual estimation)									
Volume collected (L): ML		12X143	12X143	12X143	12X143	12X143	12X143	12X143	
Total volume collected (L): ML		12012		Collect 3.33-litres each hour for a total minimum volume of 20-litres					
Sludge Sample Point		<input type="radio"/> Composite Sample		<input type="radio"/> Grab Sample		Start Time:		Stop Time:	
Sampling Locations:		GPS coordinates:				Lat.: N / S		Long: E / W	
Sampling Mode:		<input type="radio"/> Manual		<input type="radio"/> Autosampler - Sampling Device Description/ Owner:					
Sampling Time (hours)		0	1	2	3	4	5	6	Average
Recording time of discrete sample									--
Colour (visual estimation)									
Comments/ Other Observations									

END OF REPORT