Hohenstein Laboratories Bangladesh Limited • 122/1 Love Road • Tejgaon I/A • Dhaka-1208

Nice Cotton Limited
South Panishail, Kashimpur
Gazipur-1700, Bangladesh.

Hohenstein Laboratories Bangladesh Limited

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Dhaka-1208 · Bangladesh

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Business process.	Contact person	Our ref.	Date
	Kanta, Johny Yasmin	sbu/fah	26.04.2025

Report no. 25.0.96000

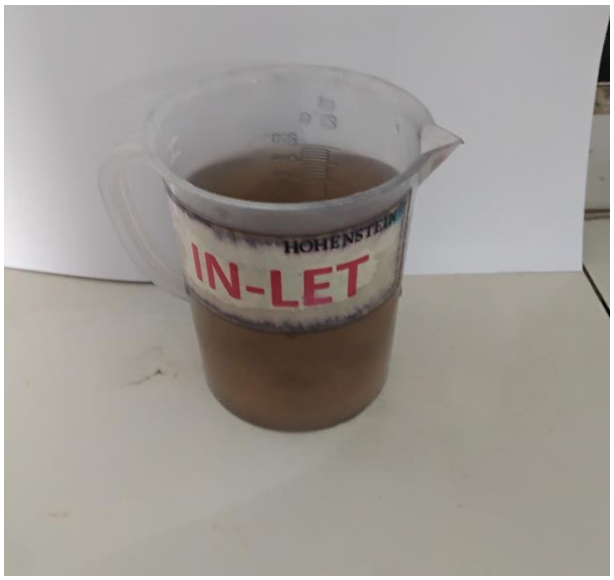
Client	:	Nice Cotton Limited
Contact person	:	Md. Tanzimul Kabir
Date of order	:	13/04/2025
Sampling Date	:	15/04/2025
Sample received date in Lab.	:	15/04/2025
Period of Testing	:	15/04/2025 to 25/04/2025
Person in-charge (Name & ZDHC ID)	:	A. S. M. Ferdous ZDHC-A-24-E-C001068-R4213-5E7DC
Person of sampling (Name & ZDHC ID)	:	Md Mahidur Rahman ZDHC-A-24-E-C001068-R40B8-D9CC2
Sampling Method	:	☐ Spot sampling ☒ Composite sampling
Weather condition sampling period	:	☐Dry ☒Sunny ☐Overcast ☐Foggy ☐Rainy ☐Others
Type of discharge	:	☒Direct ☐Indirect ☐ZLD
Type of Treatment	:	☒With pretreatment ☐Without pretreatment
Sampling period	:	8:30 am to 2:30pm
Testing material	:	☒Wastewater ☒Sludge
Sampling	:	☒Performed by Hohenstein ☐Self
Cross check sample taken by Customer.	:	☐Yes ☒No
Aim of Testing	:	Analysis of wastewater according to the ZDHC wastewater guidelines (Version 2.2, September 2024)
Local Legal standard name	:	The environmental Conservation Rules, 2023; Government of the Peoples Republic of Bangladesh; Ministry of Environment, Forest, and climate change

TESTING MATERIAL

General information

Effluent treatment Plant (ETP) / facility		
GPS Location	Latitude	23.987063
	Longitude	90.262272

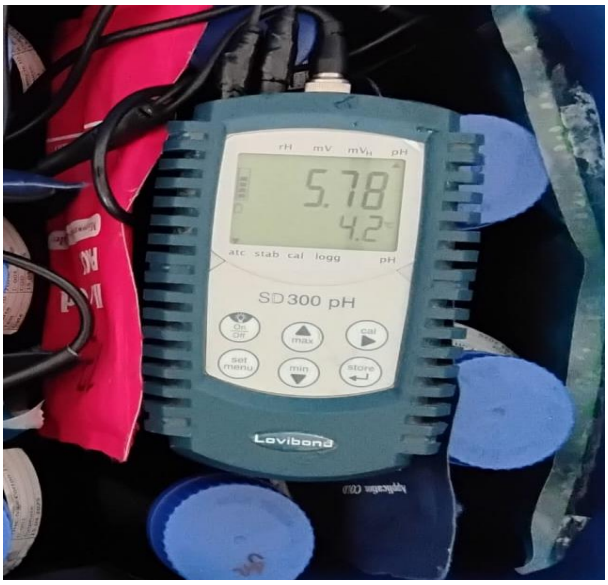
Untreated Wastewater (on-site assessment)				
Color Impression	:	Light Orange		
Turbidity	:	☒ Not turbid	☐ Turbid	
Odor	:	☐ Odorless	☐ Slight	☒ Pungent
Foaming	:	☒ Not Visible	☐ Visible	



Discharged wastewater (on-site assessment)				
Color Impression	:	Light Purple		
Turbidity	:	☒Not turbid	☐Turbid	
Odor	:	☒Odorless	☐Slight	☐Pungent
Foaming	:	☒Not Visible	☐Visible	

Sludge (on-site assessment)		
Identification, Designation of the sampling point		
Color Impression	:	Dark Grey
Odor	:	☐ Odorless ☐Slight ☒Pungent
Physical State	:	☐ Liquid ☐Paste ☐Semi-Solid ☒Solid ☐Other

Collected Sample (on-site Preservation)		
Laboratory Sample Receiving Temperature	:	4.2 °C



TERMS OF USE

The results relate only to the samples examined. The measurement uncertainty of the method is already considered while determining limit values, unless otherwise noted. This report must only be reproduced in full and not in extract form. Use of the report in advertising or the publication of free interpretations of the results is only allowed with the express permission of Hohenstein. Only the authorized report is legally binding.
The accreditation applies for the methods listed in the annex to the certificate (accreditations see http://www.hohenstein.de/de/about_hohenstein/accreditation/accreditation.html) – marked(A) in the report."

List of Abbreviations

LOD	=	Limit of quantification	-:	=	test not conducted
n.d	=	Not detectable	f	=	On-site tested
n.a	=	Not Applicable	#	=	Test Subcontract at ISO 17025:2017 Accredited Lab
RL	=	Reporting Limit			

SUMMARY OF TEST RESULT

Table 1	Test	Untreated wastewater
1A	Alkylphenols (AP) and Alkylphenol Ethoxylates (APEOs)	Meets
1B	o-Phenyl phenol (OPP)	Meets
1B	Triclosan	Meets
1B	Permethrin	Meets
1C	Chlorinated Paraffins (SCCP)	Meets
1D	Chlorobenzenes and Chlorotoluene (COC)	Meets
1E	Chlorophenols (PCP)	Meets
1F	N, N-di-methyl formamide (DMFa)	Meets
1G	Carcinogenic Dyes	Meets
1H	Disperse Dyes	Meets
1I	Flame Retardants	Meets
1J	Glycols	Meets
1K	Halogenated Solvents	Meets
1L	Organotin Compounds	Meets
1M	Other/Miscellaneous chemicals	Meets
1N	Perfluorinated and Polyfluorinated Chemicals (PFCs)	Meets
1O	Phthalates	Meets
1P	Polycyclic Aromatic Hydrocarbons (PAHs)	Meets
1Q	Aromatic amines (Azo)	Meets
1R	UV Absorbers	Meets
1S	Volatile Organic Compounds (VOC)	Meets

Table 2	Heavy Metals parameters	Discharged wastewater		
		Foundational	Progressive	Aspirational
01	Antimony (Sb)	Report data, refer data		Meets
02	Chromium (Cr)			Meets
03	Cobalt (Co)			Meets
04	Copper (Cu)			Meets
05	Nickel (Ni)			Meets
06	Silver (Ag)			Meets
07	Zinc (Zn)			Meets
08	Arsenic (As)			Meets
09	Cadmium (Cd)			Meets
10	Lead (Pb)			Meets
11	Mercury (Hg)			Meets
12	Chromium (VI)			Meets
13	Boron (Salt)			-
14	Barium (Ba)			-
15	Selenium (Se)			-
16	Tin (Sn)			-

Table 3	Conventional parameters	Discharged wastewater		
		Foundational	Progressive	Aspirational
01	Temperature difference [°C]			Meets
02	Total Suspended Solids (TSS)		Meets	
03	Chemical Oxygen Demand (COD)			Meets
04	Total-Nitrogen (TN)			Meets
05	Total-Phosphorus			Meets
06	pH value			Meets
07	Colour (436 nm, 525 nm, 620 nm)		Meets	
08	Biochemical Oxygen Demand (BOD_5)			Meets
09	Ammonium-N (as NH_4)			Meets
10	Adsorbable Organic Halogen (AOX)		Meets	
11	HEM (Oil and Grease)		Meets	

12	Total Phenol	Meets
13	Total Dissolved Solid (TDS)	-
14	Wastewater Flowrate (m^3/day)	-
15	Persistent Foam	-
16	Dissolved Oxygen (DO)	-
17	Total chlorine	-
18	E.coli	Meets

Table 3	**Anions**	**Discharged wastewater**		
		Foundational	**Progressive**	**Aspirational**
01	Cyanide		Meets	
02	Chloride			-
03	Sulfide	Meets		
04	Sulfate			-
05	Sulfite		Meets	

Table 4	**Heavy Metals parameters**	**Sludge**	
		Total	**Leachate**
01	Antimony (Sb)	:-	
02	Chromium (Cr)	:-	
03	Cobalt (Co)	:-	
04	Copper (Cu)	:-	
05	Nickel (Ni)	:-	
06	Silver (Ag)	:-	
07	Zinc (Zn)	:-	
08	Arsenic (As)	:-	
09	Cadmium (Cd)	:-	
10	Lead (Pb)	:-	
11	Mercury (Hg)	:-	
12	Chromium VI	:-	
13	Boron (Salt)	:-	
14	Barium (Ba)	:-	
15	Selenium (Se)	:-	
16	Tin (Sn)	:-	

Table 4	**Sludge parameters**	**Sludge**
01	pH	:-
02	Paint Filter Test	Meets
03	Fecal Coliform	:-
04	% Solids	Meets
05	Cyanide	:-
06	Alkylphenols (AP) and Alkylphenol Ethoxylates (APEOs)	:-
07	Polycyclic Aromatic Hydrocarbons (PAHs)	:-
08	Chlorotoluenes (only)	:-

Sludge Disposal Pathways	
Pathway	**Disposal System**
☐A	On-site or Offsite Incineration at >1000°C
☐B	Landfill with Significant Control Measures
☒C	Building Products Processed at >1000°C
☐D	Landfill with Limited Control Measures
☐E	Offsite Incineration and Building Products Processed at <1000°C
☐F	Landfills with No Control Measures
☐G	Land Application for a specific purpose in approved areas.

ANALYTICAL TEST REPORT

Table 1A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) including all isomers (Untreated wastewater)

Method:	DIN EN ISO 18857-2 (modified LC-MS/MS Determination)
LOD:	0.5 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Nonylphenol (NP), mixed isomers	Multiple Including - 104-40-5 11066-49-2 25154-52-3 84852-15-3	5	n.d
Octylphenol (OP), mixed isomers	Multiple Including - 140-66-9 1806-26-4 27193-28-8	5	n.d
Octylphenol ethoxylates (OPEO)	Multiple Including - 9002-93-1 9036-19-5 68987-90-6	5	n.d
Nonylphenol ethoxylates (NPEO)	Multiple Including - 9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	5	n.d

Table 1B. o-Phenylphenol (+salts) (for Untreated wastewater)

Method:	BS EN 12673:1999, ISO 14154:2005; USEPA 8270E Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS/MS
LOD:	10 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
o-Phenylphenol (+salts)	90-43-7	100	n.d

Table 1B. Triclosan (for Untreated wastewater)

Method:	BS EN 12673-1999 (modified solvent extraction, LC-MS/MS determination)
LOD:	10 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Triclosan	3380-34-5	100	n.d

Table 1B. Permethrin (for Untreated wastewater)

Method:	ISO 14154 :2005 or solvent extraction without derivatization, LC-MS/MS determination
LOD:	10 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Permethrin	Multiple including- 52645-53-1	500	n.d

Table 1C. Chlorinated Paraffins (for Untreated wastewater)

Method:	SCCPs & MCCP: ISO18219-2:2021&ISO 12010:2019 (solvent extraction, GC-NCI-MS/MS determination)
LOD:	5 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Middle-chain chlorinated Paraffins (MCCP) (C14-C17)	85535-85-9	500	n.d
Short-chain chlorinated Paraffins (SCCP) (C10-C13)	85535-84-8	25	n.d

Table 1D. Chlorobenzenes and Chlorotoluene's (for Untreated wastewater)	
Method:	Dichloromethane extraction followed by GC-MS/MS
LOD:	0.01 µg/l

Substances	CAS-No.	RL(µg/L)	Sample Results
Mono chlorobenzene	Multiple including - 108-90-7	0.2	n.d
1,2-Dichlorobenzene	95-50-1	0.2	n.d
1,3-Dichlorobenzene	541-73-1	0.2	n.d
1,4-Dichlorobenzene	106-46-7	0.2	n.d
1,2,3-Trichlorobenzene	87-61-6	0.2	n.d
1,2,4-Trichlorobenzene	120-82-1	0.2	n.d
1,3,5-Trichlorobenzene	108-70-3	0.2	n.d
1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	n.d
1,2,3,5-Tetrachlorobenzene	634-90-2	0.2	n.d
1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	n.d
Penta chlorobenzene	608-93-5	0.2	n.d
Hexa chlorobenzene	118-74-1	0.2	n.d
2-Chlorotoluene	95-49-8	0.2	n.d
3-Chlorotoluene	108-41-8	0.2	n.d
4-Chlorotoluene	106-43-4	0.2	n.d
2,3-Dichlorotoluene	32768-54-0	0.2	n.d
2,4-Dichlorotoluene	95-73-8	0.2	n.d
2,5-Dichlorotoluene	19398-61-9	0.2	n.d
2,6-Dichlorotoluene	118-69-4	0.2	n.d
3,4-Dichlorotoluene	95-75-0	0.2	n.d
3,5-Dichlorotoluene	25186-47-4	0.2	n.d
2,3,4-Trichlorotoluene	7359-72-0	0.2	n.d
2,3,6-Trichlorotoluene	2077-46-5	0.2	n.d
2,4,5-Trichlorotoluene	6639-30-1	0.2	n.d
2,4,6-Trichlorotoluene	23749-65-7	0.2	n.d
3,4,5-Trichlorotoluene	21472-86-6	0.2	n.d
2,3,4,5-Tetrachlorotoluene	1006-32-2	0.2	n.d
2,3,5,6-Tetrachlorotoluene	1006-31-1	0.2	n.d
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	n.d
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	n.d
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	n.d
Penta chlorotoluene	877-11-2	0.2	n.d

Table 1E. Chlorophenols (for Untreated wastewater)	
Method:	DIN EN 12673:1999 (Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS/MS)
LOD:	0.2µg/l

Substances	CAS-No.	RL(µg/L)	Sample Results
2-Chlorophenol	95-57-8	0.5	n.d
3-Chlorophenol	108-43-0	0.5	n.d
4-Chlorophenol	106-48-9	0.5	n.d
2,3-Dichlorophenol	576-24-9	0.5	n.d
2,4-Dichlorophenol	120-83-2	0.5	n.d
2,5-Dichlorophenol	583-78-8	0.5	n.d
2,6-Dichlorophenol	87-65-0	0.5	n.d
3,4-Dichlorophenol	95-77-2	0.5	n.d
3,5-Dichlorophenol	591-35-5	0.5	n.d
2,3,4-Trichlorophenol	15950-66-0	0.5	n.d
2,3,5-Trichlorophenol	933-78-8	0.5	n.d
2,3,6-Trichlorophenol	933-75-5	0.5	n.d
2,4,5-Trichlorophenol	95-95-4	0.5	n.d
2,4,6-Trichlorophenol	88-06-2	0.5	n.d
3,4,5-Trichlorophenol	609-19-8	0.5	n.d
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	n.d
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	n.d
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	n.d
Pentachlorophenol	87-86-5	0.5	n.d

Table 1F. N, N-di-methyl formamide (DMFa) (for Untreated wastewater)	
Method:	EPA8015, EPA8270 E (Analysis by GC-MS/MS)
LOD:	1 µg/L

Substances	CAS-No.	RL(µg/L)	Sample Results
N, N-dimethylformamide (DMFa)	68-12-2	1000	n.d

Table 1G. Carcinogenic Dyes (for Untreated wastewater)	
Method:	Liquid extraction, HPLC-MS/MS determination
LOD:	0.1µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Basic violet 3 with>0.1% of Michler´s Ketoneb	548-62-9	500	n.d
C.I. Acid Red 26	3761-53-3	500	n.d
C.I. Acid Violet 49	1694-09-3	500	n.d
C.I. Basic Blue 26 (with Michler's Ketone>0.1%)	2580-56-5	500	n.d
C.I. Basic Green 4 (Malachite Green Chloride)	569-64-2	500	n.d
C.I. Basic Green 4 (Malachite Green Oxalate)	2437-29-8	500	n.d
C.I. Basic Green 4 (Malachite Green chloride)	10309-95-2	500	n.d
C.I. Basic Red 9	569-61-9	500	n.d
C.I. Basic Violet 14	632-99-5	500	n.d
C.I. Direct Black 38	1937-37-7	500	n.d
C.I. Direct Blue 6	2602-46-2	500	n.d
C.I. Direct Red 28	573-58-0	500	n.d
C.I. Disperse Blue 1	2475-45-8	500	n.d
C.I. Disperse Blue 3	2475-46-9	500	n.d
Disperse Orange 11	82-28-0	500	n.d

Parameter hints:

*) **Acid Red 26**, **Direct Black 38**, **Direct Blue 6** and **Direct Red 28** have no value since no direct quantitative analysis is possible. May be included as a fission product in Table 1R: Restricted Aromatic Amines (Cleavable from Azo colourants)

Table 1H. Disperse (Allergenic) Dyes (for Untreated wastewater)	
Method:	Liquid extraction, HPLC-MS/MS determination
LOD:	0.1 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Disperse Blue 102	12222-97-8	50	n.d
Disperse Blue 106	12223-01-7	50	n.d
Disperse Blue 124	61951-51-7	50	n.d
Disperse Blue 26	3860-63-7	50	n.d
Disperse Blue 35	12222-75-2	50	n.d
Disperse Blue 35	56524-77-7	50	n.d
Disperse Blue 7	3179-90-6	50	n.d
Disperse Brown 1	23355-64-8	50	n.d
Disperse Orange 1	2581-69-3	50	n.d
Disperse Orange 3	730-40-5	50	n.d
Disperse Orange 37/59/76	13301-61-6	50	n.d
Disperse Red 1	2872-52-8	50	n.d
Disperse Red 11	2872-48-2	50	n.d
Disperse Red 17	3179-89-3	50	n.d
Disperse Yellow 1	119-15-3	50	n.d
Disperse Yellow 3	2832-40-8	50	n.d
Disperse Yellow 39	12236-29-2	50	n.d
Disperse Yellow 49	54824-37-2	50	n.d
Disperse Yellow 9	6373-73-5	50	n.d

Table 1I. Flame Retardants (for Untreated wastewater)	
Method:	USEPA8270E, ISO 22032, USEPA 527 and USEPA 8321B (modified, solvent extraction, GC-MS/MS, and LC-MS/MS determination)
LOD:	0.5µg/L

Substances	CAS-No.	RL(µg/L)	Sample Results
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	25	n.d
Bis(2,3-dibromopropyl) phosphate (BDBPP)	5412-25-9	25	n.d
Deca bromodiphenyl ether (Deca BDE)	1163-19-5	25	n.d
Hexa bromocyclodecane (HBCDD)	3194-55-6	25	n.d
Octa bromodiphenyl ether (Octa BDE)	32536-52-0	25	n.d
Penta bromo diphenyl ether (Penta BDE)	32534-81-9	25	n.d
Poly bromo biphenyls (PBB)	59536-65-1	25	n.d
Tetra bromo bisphenol A (TBBPA)	79-94-7	25	n.d
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	25	n.d
Tris (1-aziridinyl) phosphine oxide) (TEPA)	545-55-1	25	n.d
Tris (1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	25	n.d
Tris (2-chloroethyl) phosphate (TCEP)	115-96-8	25	n.d
Tris (2,3-dibromopropyl)-phosphate (TRIS	126-72-7	25	n.d
Deca bromobiphenyl (Deca BB)	13654-09-6	25	n.d
Dibromobiphenyls (DiBB)	Multiple	25	n.d
Octa bromobiphenyls (Octa BB)	Multiple	25	n.d
Di-bromopropylether	21850-44-2	25	n.d
Hepta bromodiphenyl ether (Hepta BDE)	68928-80-3	25	n.d
Hexa bromodiphenyl ether (Hexa BDE)	36483-60-0	25	n.d
Mono bromobiphenyls (Mono BB)	Multiple	25	n.d
Mono bromodiphenyl ethers (Mono BDEs)	Multiple	25	n.d
Nonabromobiphenyls (Nona BB)	Multiple	25	n.d
Nona bromodiphenyl ether (Nona BDE)	63936-56-1	25	n.d
Tetra bromodiphenyl ether (Tetra BDE)	40088-47-9	25	n.d
Tri bromodiphenyl ethers (TriBDEs)	Multiple	25	n.d
Boric acid	10043-35-3/11113-50-1	500	n.d
Diboron trioxide	1303-86-2	500	n.d
Disodium octaborate	12008-41-2	500	n.d
Disodium tetraborate anhydrous	1303-96-4/1330-43-4	100	n.d
Tetraboron disodium heptaoxide, hydrate	12267-73-1	100	n.d

Result value details:

[1)] value refers to elemental boron, not the salt (determined as total boron via ICP).

Table 1J. Glycols/Glycol Ethers (for Untreated wastewater)	
Method:	USEPA 8270E (modified: Liquid extraction SPE extraction, GC-MS determination)
LOD:	6.0µg/L

Substances	CAS-No.	RL(µg/L)	Sample Results
2-ethoxyethanol	110-80-5	50	n.d
2-ethoxyethylAcetate	111-15-9	50	n.d
2-methoxyethanol	109-86-4	50	n.d
2-methoxyethylacetate	110-49-6	50	n.d
2-methoxypropylacetate	70657-70-4	50	n.d
Bis(2-methoxyethyl) ether	111-96-6	50	n.d
Ethylene glycol dimethyl ether	110-71-4	50	n.d
Tri ethylene glycol dimethyl ether	112-49-2	50	n.d

Table 1K. Halogenated Solvents (for Untreated wastewater)	
Method:	USEPA 8260D (Headspace GC-MS)
LOD:	1.0µg/L (wastewater)

Substances	CAS-No.	RL (µg/L)	Sample Results
1,2-Dichloroethane	107-06-2	1	n.d
Methylene chloride	75-09-2	1	n.d
Tetrachloroethylene	127-18-4	1	n.d

Trichloroethylene	79-01-6	1	n.d

Table 1L. Organotin Compounds (for Untreated wastewater)

Method:	DIN EN ISO 17353 (solvent extraction, GC-MS/MS determination)
LOD:	0.01µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Di propyl tin compounds (DPT)	Multiple including 867-36-7	0.01	n.d
Mono, di and tri-butyl tin derivatives	Multiple including 1118-46-3 ;1461-22-9	0.01	n.d
Mono, di-and tri-methyl tin derivatives	Multiple including, 993-16-8 ;753-73-1; 1066-45-1	0.01	n.d
Mono, di-and tri-octyl tin derivatives	Multiple including ,3091-25-6; 3542-36-7; 2587-76-0	0.01	n.d
Mono, di-and tri-phenyl tin derivatives	Multiple including- 1124-19-2; 1135-99-5; 639-58-7	0.01	n.d
Tetra butyl tin compounds (TeBT)	Multiple including - 1461-25-2	0.01	n.d
Tri propyl tin Compounds (TPT)	Multiple including - 2279-76-7	0.01	n.d
Tetra octyl tin compounds (TeOT)	Multiple including - 3590-84-9	0.01	n.d
Tri cyclohexyl tin (TCyHT)	Multiple including - 3091-32-5	0.01	n.d
Tetra ethyl tin Compounds (TeET)	Multiple including - 597-64-8	0.01	n.d

Table 1M. Other/Miscellaneous chemicals (for Untreated wastewater)

Method:	Liquid extraction, LC-MS/MS/ICP-MS (For total Boron & Zinc), SOP-QM-11 BD 02 A6 009; (According to DIN EN 71-10 & 11, DIN EN ISO 14389:2013)
LOD:	0.10µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
AEEA[2-(2-aminoethylamino) ethanol]	111-41-1	500	n.d
Bisphenol A	80-05-7	10	n.d
Thiourea	62-56-6	50	n.d
Quinoline	91-22-55	50	n.d
Borate, zinc salt*	12767-90-7	100	n.d

*Limit refers to boron and zinc individually, not the salt.

Table 1N. Perfluorinated and Polyfluorinated Chemicals (PFCs) (for Untreated wastewater)

Method:	EN 12673-1999; EPA 8270 PFCs: LC-MSMS; FTOH: GCMS/MS (Reference: SOP-QM-11 BD 02 A8 007)
LOD:	0.01µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Perfluoro octane sulfonate (PFOS) and related substances, Perfluorooctanoic Acid (PFOA)	Multiple including - 1763-23-1	0.01	n.d
Perfluoro octanoic acid (PFOA) related substances	Multiple including- 335-67-1	1.00	n.d

Table 1O. Phthalates (for Untreated wastewater)

Method:	ISO18856(modified: Dichloromethane extraction, GC-MS/MS determination)
LOD:	2 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
1,2-benzene dicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP)	71888-89-6 84777-06-0	10	n.d
1,2-benzene dicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)	68515-42-4 68515-50-4	10	n.d
Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	10	n.d
Butyl benzyl phthalate (BBP)	85-68-7	10	n.d
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	n.d
Di-iso-decyl phthalate (DIDP)	26761-40-0	10	n.d
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	n.d
Di-isobutyl phthalate (DIBP)	84-69-5	10	n.d
Di-iso nonyl phthalate (DINP)	28553-12-0	10	n.d
Di-n-hexyl phthalate (DnHP)	84-75-3	10	n.d
Di-n-octyl phthalate (DNOP)	117-84-0	10	n.d
Di-n-pentyl phthalates	131-18-0	10	n.d

Di-n-propyl phthalate (DPRP)	131-16-8	10	n.d
Di (ethyl hexyl) phthalate (DEHP)	117-81-7	10	n.d
Di-butyl phthalate (DBP)	84-74-2	10	n.d
Di-ethyl phthalate (DEP)	84-66-2	10	n.d
Di-isopentyl phthalates	605-50-5	10	n.d
Di-nonyl phthalate (DNP)	84-76-4	10	n.d

Table 1P. Polycyclic Aromatic Hydrocarbons (PAHs) (for Untreated wastewater)

Method:	USEPA 8270E, DIN38407-39 Solvent extraction, GC-MS/MS determination
LOD:	0.01µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
Acenaphthene	83-32-9	1	n.d
Acenaphthylene	208-96-8	1	n.d
Anthracene	120-12-7	1	n.d
Benzo [a] anthracene	56-55-3	1	n.d
Benzo [a] pyrene (BaP)	50-32-8	1	n.d
Benzo [b]fluoranthene	205-99-2	1	n.d
Benzo [e] pyrene	192-97-2	1	n.d
Benzo [g h i] perylene	191-24-2	1	n.d
Benzo [j] fluoranthene	205-82-3	1	n.d
Benzo [k] fluoranthene	207-08-9	1	n.d
Chrysene	218-01-9	1	n.d
Dibenzo [a, h] anthracene	53-70-3	1	n.d
Fluoranthene	206-44-0	1	n.d
Fluorene	86-73-7	1	n.d
Indeno [1,2,3- c, d] pyrene	193-39-5	1	n.d
Naphthalene	91-20-3	1	n.d
Phenanthrene	85-01-8	1	n.d
Pyrene	129-00-0	1	n.d

Table 1Q. Aromatic amines (Azo) (for Untreated wastewater)

Method:	Reduction step with sodium dithionite, solvent extraction EPA-8270 and ISO 14362-1 and ISO 14362-3 (both modified; HPLC-MS/MS determination)
LOD:	0.1 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
2-naphthylamine	91-59-8	0.1	n.d
2-Naphthylammoniumacetate	553-00-4	0.1	n.d
2,4-xylidine	95-68-1	0.1	n.d
2,4,5-trimethylaniline	137-17-7	0.1	n.d
2,4,5-trimethylanilinehydrochloride	21436-97-5	0.1	n.d
2,6-xylidine	87-62-7	0.1	n.d
3,3'-dichlorobenzidine	91-94-1	0.1	n.d
3,3-dimethoxylbenzidine	119-90-4	0.1	n.d
3,3-dimethylbenzidine	119-93-7	0.1	n.d
4-aminoazobenzene	60-09-3	0.1	n.d
4-aminodiphenyl	92-67-1	0.1	n.d
4-chloro-o-toluidine	95-69-2	0.1	n.d
4-chloro-o-toluidiniumchloride	3165-93-3	0.1	n.d
4-chloroaniline	106-47-8	0.1	n.d
4-methoxy-m-phenylene di-ammonium sulphate;2,4-diaminoanisolesulphate	39156-41-7	0.1	n.d
4-methoxy-m-phenylenediamine	615-05-4	0.1	n.d
4-methyl-m-phenylenediamine	95-80-7	0.1	n.d
4,4-methylene-bis-(2-chloro-aniline)	101-14-4	0.1	n.d
4,4-methylenedi-o-toluidine	838-88-0	0.1	n.d
4,4-methylenedianiline	101-77-9	0.1	n.d
4,4-oxydianiline	101-80-4	0.1	n.d
4,4-thiodianiline	139-65-1	0.1	n.d
5-nitro-o-toluidine	99-55-8	0.1	n.d
6-methoxy-m-toluidine	120-71-8	0.1	n.d

Benzidine	92-87-5	0.1	n.d
o-amino azo toluene	97-56-3	0.1	n.d
o-anisidine	90-04-0	0.1	n.d
o-toluidine	95-53-4	0.1	n.d

Table 1R. UV Absorbers (for Untreated wastewater)

Method:	USEPA 8270 ISO 22032, USEPA 527 and USEPA 8321 B. (Dichloromethane extraction, GC-MS/MS)
LOD:	1.0 µg/L

Substances	CAS-No.	RL (µg/L)	Sample Results
2-(2H-benzotriazol-2-yl)-4- (tert-butyl)-6-(sec-butyl) phenol (UV-350)	36437-37-3	100	n.d
2-(2H-benzotriazol-2-yl)-4,6- Di tert pentyl phenol (UV-328)	25973-55-1	100	n.d
2-benzotriazol-2-yl-4,6-di-tertbutylphenol (UV-320)	3846-71-7	100	n.d
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	100	n.d

Table 1S. Volatile Organic Compounds (VOC) (for Untreated wastewater)

Method:	ISO 20595 (Headspace GC-MS)
LOD:	1.0µg/L (wastewater)

Substances	CAS-No.	RL (µg/L)	Sample Results
Benzene	71-43-2	1	n.d
m-cresol	108-39-4	1	n.d
o-cresol	95-48-7	1	n.d
p-cresol	106-44-5	1	n.d
Xylene	1330-20-7	1	n.d
Toluene	108-88-3	1	n.d

Table 2. Heavy Metals parameters: (for Discharged wastewater)

Method:	ISO-17294, Chromium (VI)-ISO 18412
LOD:	As per Below list

Metals	LOD mg/L	Limit values according to ZDHC wastewater guidelines (mg/L unless otherwise noted)			Sample Results [mg/L]
		Cat.I	Cat.II	Cat.III	Discharged wastewater
Antimony[2] (Sb)	0.0010	0.10	0.05	0.010	n.d
Chromium (Cr)	0.0010	0.20	0.10	0.050	n.d
Cobalt (Co)	0.0010	0.05	0.02	0.010	n.d
Copper (Cu)	0.0010	1.00	0.50	0.250	n.d
Nickel (Ni)	0.0010	0.20	0.10	0.050	n.d
Silver (Ag)	0.0010	0.10	0.05	0.005	n.d
Zinc (Zn)	0.0010	5.00	1.00	0.500	n.d
Arsenic (As)	0.0010	0.05	0.01	0.005	n.d
Cadmium (Cd)	0.0001	0.10	0.05	0.010	n.d
Lead (Pb)	0.0010	0.10	0.05	0.010	n.d
Mercury (Hg)	0.00002	0.01	0.005	0.001	n.d
Chromium (VI)	0.001	0.05	0.005	0.001	n.d
Barium (Ba)	0.001	Sample and Report only			n.d
Selenium (Se)	0.001				0.016
Tin (Sn)	0.001				n.d
Boron (Salt)	0.001				n.d

Note: Cat.I = Foundational Cat.II = Progressive Cat.III = Aspirational

Parameter hints:

For indirect dischargers, the requirement in the ZDHC-Guideline for heavy metals only test the following: Arsenic, Cadmium, Chromium (VI), Lead, Mercury.

For the facilities with indirect without pretreatment discharge type ZDHC MRSL substances as well as ZDHC heavy metals (arsenic, cadmium, chromium (VI), lead, mercury) as explained in the above table should be sampled and tested only at untreated wastewater as there is no pretreatment involved.

Result value details:

[2)] Note: Antimony is used as a catalyst in polyester fiber manufacture and may leach out in wastewater at polyester fabric or yarn or fiber processing facilities. Brands and suppliers are encouraged to work with their polyester fiber suppliers to control antimony in their input materials.

Table 3. Conventional parameters

Conventional parameters	Method	LOD	Limit values according to (ZDHC Version 2.2, Sep. 2024) Wastewater guideline (mg/L unless otherwise noted)			Sample Results [mg/L]
			Cat.I	Cat.II	Cat.III	Discharged wastewater
Temperature difference [°C] (f)	DIN 38404-4	n.a	Δ+15	Δ+10	Δ+5	Δ+ 2.3
Total Suspended Solids (TSS)	ISO 11923	4 mg/L	50	15	5	15.0
Chemical Oxygen Demand (COD)	ISO 6060 and ISO 15705	4 mg/L	150	80	40	10.1
Total-N	ISO 11905 Part 1 ISO 29441	0.5 mg/L	20	10	5	4.21
Total-Phosphorus	ISO 17294	0.10 mg/L	3	0.5	0.1	n.d
pH value (f)	ISO 10523	n.a.	6-9			8.16
Colour (436 nm)	ISO 7887-B	n.a.	7	5	2	2.59
Colour (525 nm)		n.a.	5	3	1	2.39
Colour (620 nm)		n.a.	3	2	1	1.87
BOD_5	ISO 5815-1	1 mg/L	30	15	8	6.0
Ammonium-N	ISO 11732 and ISO 7150	0.01 mg/L	10	1	0.5	0.07
AOX	HACH LCK 390	0.05mg/L	3	0.5	0.1	0.460
HEM (Oil and Grease)	ISO 9377-2	0.5mg/L	10	2	0.5	1.50
Total Phenol / Phenol Index	ISO 6439	0.001mg/L	0.5	0.01	0.001	n.d
Total Dissolved Solid (TDS)	USEPA 160.1	10.0mg/L	Sample and report only			162.0
Wastewater Flowrate (f)	-	15m^3 per day	Sample and report only			1242.2 m^3 per day
Persistent Foam (f)	-	n.a	No indication of Persistent foam in receiving water			Not visible
Dissolved Oxygen (DO) (f)	EPA360.1 SM 4500-O-G	2 mg/L	> 4			7.73
Total chlorine (f)	ISO7393-2	0.2 mg/L	1			0.4

Note: Cat.I = Foundational Cat.II = Progressive Cat.III = Aspirational

Table 3. Conventional Parameters (E. coli in Discharged wastewater)

Method:	SM9222D presumptive, confirm positive with SM9222G
LOD:	100MPN/ 100-mL

Conventional parameters	Limit values according to ZDHC wastewater guidelines (mg/L unless otherwise noted)	Sample Results [MPN/100mL]
E. coli (#)	126MPN/100-mL	n.d

Table 3. Anions (in Discharged wastewater)

Anions	Method	LOD	Limit values according to ZDHC wastewater guideline (mg/L unless otherwise noted)			Sample Results [mg/L]
			Cat.I	Cat.II	Cat.III	Discharged wastewater
Cyanide	ISO 6703-1, 2, 3, LCK 315 Cyanide Cuvette test	0.01mg/L	0.2	0.1	0.05	0.051
Chloride	ISO15923-1	-	report only			11.9
Sulfide	ISO10530	0.01mg/L	0.5	0.05	0.01	0.087
Sulfate	ISO15923-1	2.0mg/L	report only			102.4
Sulfite	SM4500-SO32-C	0.1mg/L	2.0	0.5	0.2	0.425

Note: Cat.I = Foundational Cat.II = Progressive Cat.III = Aspirational

Sludge: Detailed Results

Sludge Parameters - Step 1 – Conventional

Table 4C.

Conventional parameters	Limit							Result - Sludge
	Sludge Disposal Pathway							
	A	B	C	D	E	F	G	
pH	Not applicable			5-11	5-11	6.5-9	6.5-9	-:
Paint Filter Test	Not applicable			Pass	Pass	Pass	Pass	The free-standing liquid is not observed
Fecal Coliform (#)	Not applicable					< 1000	<1000	-:
% Solids	Report only							80.30
Anions								
Cyanide	Not applicable			85	70	70	70	-:

#Note: Test Subcontract at ISO 17025:2017 Accredited Lab.

Method(s):

pH: EPASW9045D
Paint Filter Test: EPASW-846 or EPA9095B
% Solids: EPA 160.3, HJ 613 at 105°C
Fecal Coliform: EPA1681, LOD: 100 MPN/g
Anions (Cyanide): Colorimetry (EPA 9014), or ISE (EPA 9213) | LOD: 0.2 mg/kg

Sludge Parameters - Step 2 – MRSL

Table 4A. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs) including all isomers

Method:	DIN EN ISO 18254-1 / DIN EN ISO 18857-2 (LC-MS/MS Determination)
LOD:	0.4mg/kg

Substances	CAS-No.	RL (µg/L)	Sample Results (sludge)
Nonyl phenol (NP), All isomers	104-40-5 11066-49-2 25154-52-3 84852-15-3	0.4	n.d
Octyl phenol (OP), All isomers	140-66-9 1806-26-4 27193-28-8	0.4	n.d
Octyl phenol ethoxylates (OPEO) All isomers	9002-93-1 9036-19-5 68987-90-6	0.4	n.d
Nonyl phenol ethoxylates (NPEO) all isomers	9016-45-9 26027-38-3 37205-87-1 68412-54-4 127087-87-0	0.4	n.d

Table 4A. Polycyclic Aromatic Hydrocarbons (PAHs)	
Method:	USEPA3550(solvent extraction, GC-MS/MS)
LOD:	0.05mg/kg

Substances	CAS-No.	RL (mg/kg)	Sample Results (sludge)
Acenaphthene	83-32-9	0.2	n.d
Acenaphthylene	208-96-8	0.2	n.d
Anthracene	120-12-7	0.2	n.d
Benzo [a] anthracene	56-55-3	0.2	n.d
Benzo [a] pyrene (BaP)	50-32-8	0.2	n.d
Benzo [b] fluoranthene	205-99-2	0.2	n.d
Benzo [e] pyrene	192-97-2	0.2	n.d
Benzo [ghi] perylene	191-24-2	0.2	n.d
Benzo [j] fluoranthene	205-82-3	0.2	n.d
Benzo [k] fluoranthene	207-08-9	0.2	n.d
Chrysene	218-01-9	0.2	n.d
Dibenz [a,h] anthracene	53-70-3	0.2	n.d
Fluoranthene	206-44-0	0.2	n.d
Fluorene	86-73-7	0.2	n.d
Indeno [1,2,3-c,d] pyrene	193-39-5	0.2	n.d
Naphthalene	91-20-3	0.2	n.d
Phenanthrene	85-01-8	0.2	n.d
Pyrene	129-00-0	0.2	n.d

Table 4A. Chlorotoluene's (for Sludge)	
Method:	Solvent extraction followed by GC-MS/MS (reference method USEPA 3650 & USEPA 827)
LOD:	0.05mg/kg

Substances	CAS-No.	RL (mg/kg)	Sample Results (sludge)
2-Chlorotoluene	95-49-8	0.2	n.d
3-Chlorotoluene	108-41-8	0.2	n.d
4-Chlorotoluene	106-43-4	0.2	n.d
2,3-Dichlorotoluene	32768-54-0	0.2	n.d
2,4-Dichlorotoluene	95-73-8	0.2	n.d
2,5-Dichlorotoluene	19398-61-9	0.2	n.d
2,6-Dichlorotoluene	118-69-4	0.2	n.d
3,4-Dichlorotoluene	95-75-0	0.2	n.d
3,5-Dichlorotoluene	25186-47-4	0.2	n.d
2,3,4-Trichlorotoluene	7359-72-0	0.2	n.d
2,3,6-Trichlorotoluene	2077-46-5	0.2	n.d
2,4,5-Trichlorotoluene	6639-30-1	0.2	n.d
2,4,6-Trichlorotoluene	23749-65-7	0.2	n.d
3,4,5-Trichlorotoluene	21472-86-6	0.2	n.d
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	n.d
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	n.d
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	n.d
Pentachlorotoluene	877-11-2	0.2	n.d

Parameter hints:

The detection of ZDHC MRSL substances in sludge is an indicator of the deliberate use of these restricted substances in input chemical formulations and therefore would need a Root Cause Analysis and Corrective Action Plan for the input chemical inventory.

Table 4B. Heavy Metals parameters: (Sludge)

Method:	Sb, As, Cr, Co, Cd, Cu, Pb, Ni, Zn: Preparation: USEPA 3050 Analysis: EPA 3050, EPA 6010D, EPA 6020B For Mercury- EPA 7473, 7471b Preparation: EPA 3051a, Analysis: EPA 6020B, Cr VI: Preparation: USEPA 3060 A Analysis: USEPA 3060a, USEPA 7196
	For Leachate: As, Cd, Cr, Pb, Sb, Ba, Co, Cu, Ni, Se, Ag, Zn: Leachate Extraction: USEPA 1311 or USEPA 3051 A Analysis: ISO 11885, ISO 17294-2, USEPA 200.7, USEPA 200.8, USEPA 6010 C or USEPA 6020 A, Cr (VI): Leachate Extraction: USEPA 1311 Analysis: ISO 18412, USEPA 7196 or USEPA 7199, Hg: Leachate Extraction: USEPA 1311 of USEPA 3051 A Analysis: ISO 12846, ISO 17852, USEPA 7471 B or USEPA 6020 B
LOD:	As per Below list

Metals	LOD (mg/kg)	Leachate result (TCLP) in mg/L								Thresold value	RL (mg/kg)	Sample Results
		A	B	C	D	E	F	G				
Arsenic (As)	0.05	Not Applicable			2.75	0.5	0.5	0.5	41	10	5.00	-:
Cadmium (Cd)	0.05				0.58	0.15	0.15	0.15	39	3	1.00	-:
Lead (Pb)	0.05				2.75	0.5	0.5	0.5	0.5	10	5.00	-:
Nickel (Ni)	0.05				11.75	3.5	3.5	3.5	400	70	20.0	-:
Mercury (Hg)	0.05				0.125	0.05	0.05	0.05	17	1	1.00	-:
Copper (Cu)	0.05				17.5	10	10	10	1500	200	50.0	-:
Selenium (Se)	0.05				0.75	0.5	0.5	0.5	36	10	5.00	-:
Total Chromium (Cr)	0.05				5.0	5.0	5.0	5.0	1200	100	50.0	-:
Zinc (Zn)	0.05				50.0	50.0	50.0	50.0	2800	1000	400	-:
Chromium (VI)	5.00				3.75	2.5	2.5	2.5	50	50	20.0	-:
Antimony (Sb)	0.05				7.8	0.6	0.6	0.6	Not applicabel	12	5.00	-:
Barium (Ba)	0.05				67.5	35.0	35.0	35.0		700	200	-:
Cobalt (Co)	0.05				80.0	80.0	80.0	80.0		1600	400	-:
Silver (Ag)	0.05				5.0	5.0	5.0	5.0		100	50.0	-:

Parameter hints:

Disposal Pathway D, E, F and G: Does not meet if detected above the reporting limit values.
Testing of Metals – Threshold Values, Leachate Testing Limit Values per Disposal Pathway in the Sludge

Hohenstein Laboratories Bangladesh Limited
Field Data Sheet (Wastewater sample collection)

HOHENSTEIN

A General Data			
Project Number	O-P-4576 (AID-A5571Y48)		
Customer Name	Nice Cotton Limited		
Facility Representative person	Md Abdur Rahman Phone No. 01713279863		
Project (Facility Name and Address)			
Factory with effluent treatment plant	☐ Yes	☐ No	
Factory is Condition	☑ Under Normal Production	☐ Non Production	
Date of collected sample	15.04.24		
Name of Sampler & ID	Ashful Amin	ZDHC ID	ZDHC A 22 E C001068 R2290 BAC02
	Md Mahidur Rahman	ZDHC ID	ZDHC A 24 E C001068 R40B8 D9CC2
		ZDHC ID	

B. ZDHC questionnaire				
01 Discharge Mode	☑ Direct ☐ Indirect ☐ Indirect with pretreatment ☐ Indirect without pretreatment ☐ Zero Liquid Discharge			
	☑ Pipe (O)	☐ Flume (U)	☐ Weir (V)	
02 Types of wastewater	☑ Industrial wastewater	☐ Industrial wastewater with domestic wastewater		
03 ETP Plant Details	Total industrial wastewater generated over 12 months by the facility		Capacity (m^3)	419873 m^3 = 1242.2 m^3 per day
	Total working days in 12 months period (full days which industrial wastewater is generated)		Day(s)	338 m3
04 Number of Sample Location(s)	Inlet/Raw sample ID ☑ R0001 ☐ R0002 ☐ R0003		Discharge sample ID ☑ D0001 ☐ D0002 ☐ D0003	
05 Sampling Location/GPS (Field ID)	Latitude a 23.987063 b.		Longitude a 90.262272	
06 Pretreatment type of ETP	☐ Chemical Treatment	☐ Combined Treatment	☑ Biological with MBR	
	☐ Bio-chemical Treatmanr	☐ Others		
07 Wastewater Discharge to aquatic body	☐ No ☐ Channel ☑ River ☐ Tank/Pond ☐ Stream		Name of aquatic body: Dhaleshwari	
08 Temparature at risk pose	☑ No	☐ Yes	(*if at risk pose add photo)	
09 Flow rate at risk	☑ No	☐ Yes	(*if at risk pose add photo)	
10 Sludge Location/ GPS ID	Latitude a 23.987797		Longitude a 90.263134	
11 Sludge Discharge to aquatic body	☑ No ☐ Channel ☐ River ☐ Tank/Pond ☐ Stream		Name of aquatic body	
12 If "No" which pretreatment are performed	☐ Aerobic Digestion	☐ Gravity thikener	☐ Filter Press	
	☐ Anaerobic Digestion	☐ On-site incineration	☐ Sludge Bed	
	☐ Belt filter press	☐ Others-Please Specify	☐ Energy recovery	
	☑ Centrifugation	☐ Plate & flame filter press	☐	
	☐ Dissolved Air Flotation (DAF)	☐ Screw press	☐	
13 Disposal pathway (Minimum 25% each) (% of disposal of each with the document)	☐ A-Offsite Incineration	☐ E-Offsite Incineration and Building Products		% of disposal
	☐ B-Landfill with Significant Control	☐ F - Landfills with No Control Measures		
	☑ C-Building Products Processed	☐ G - Land Application		
	☐ D-Landfill with Limited Control Measures	☐ Any Other(s)		
**Please collect the document on sludge disposal or a copy of your licensed third-party waste collector for sludge disposal (needed to upload in ZDHC gateway)				
Factory Type	☑ Dyeing ☐ Printing ☐ Washing ☐ Finishing	☐ Other(Please specify): Yarn Dyeing		
	*Note: It would be selected more than one			

C.Field Data for Wastewater			
Samping method	☐ Spot sampling / Grab Sampling	☑ Composite sampling	☐ Others
Sampling Mode	☐ Auto Sampler	☑ Manual	☐ Combined
Persistent Foam (if "yes" take photo)	☐ Yes	☑ No	
Sample matrix	☐ Incoming Water (Ground water)		
	☑ Inlet Wastewater (Before treatment/Raw wastewater)		
	☑ Outlet Wastewater (After treatment) at discharge point		
	☑ Sludge		

HOHENSTEIN

Hohenstein Laboratories Bangladesh Limited

Field Data Sheet (Waste water sample collection)

HOHENSTEIN

Inlet / Before treatment/ Raw	1	2	3	4	5	6	7	8	Mean	Remarks
Recording Time	10:00	11:00	12:00	1:00	2:00	3:00				
pH	7.74	7.71	6.33	7.47	9.18	8.51			7.82	
Temperature (°C)	39.5	38.1	40.9	39.9	39.1	39.6			39.5	
Total Chlorine	0.2	0.2	0.2	0.2	0.2	0.2			0.2	
Dissolved Oxygen	1.84	1.78	1.92	1.85	1.72	1.96			1.84	
Visual Color (On site)	L.Red	L.purple.	purple	L.pink	orange				L.Orange	
Odour	pungent	pungent	pungent	pungent					pungent	

Outlet / After treatment/ Discharge	Outlet Wastewater (after treatment) at discharge point									
	1	2	3	4	5	6	7	8	Mean	QC measure
Recording Time	10:00	11:00	12:00	1:00	2:00	3:00				pH Value
pH	8.16	8.12	8.15	8.16	8.18	8.17			8.16	✓ Meet
Temperature (°C)	28.8	28.6	28.3	28.7	29.0	29.3			28.8	☐ Not-Meet
Total Chlorine	0.4	0.4	0.4	0.4	0.4	0.4			0.4	Chlorine
Dissolved Oxygen	7.73	7.68	7.70	7.74	7.78	7.76			7.73	✓ Meet
Visual Color (On site)	L.purple	L.purple							L.purple	☐ Not-Meet
Odour	No	No	No	No	No	No				
Flowrates per hrs (m³)	189	206	209	163	202	186	Risky flow	☐ Yes	✓ No	
Temperature of Receiving Body	26.5°C									
(If Temp Δ >15°C, add photo)	Δ+2.3°C									

Sludge	2DHC-Nice-15-04	Remarks
Recording Time	2:30 pm	
Odour	pungent	
Color	Dark Grey	

D.Analysis Required and Preservation Method				
Test	Test Required	Sample Volumn (ml)	Type of Container	Preservation Method
01 Banned Amines (AZO)		1000 ml	Amber glass bottle	Cool at 2-8°C
02 Dispers. AP APEO PFC		4000 ml	Amber glass bottle	
03 Chlorophenols (PCP)		1000 ml	Amber glass bottle	
04 Carrier, sccp, mccp, phthalates, UV absorber, PAH, flame retardants, Glycols		5000 ml	Amber glass bottle	
05 TSS & TDS		200 ml	Amber glass bottle	
06 TOC & Chloride		100 ml	Glass Bottle	
07 BOD₅		1000 ml	Amber glass bottle	
08 Sulphate		100 ml	Amber glass bottle	
09 Colour (m-1) (436nm, 525, 620nm)		500 ml	Amber glass bottle	
10 total N		100 ml	Amber glass bottle	pH 2 H_2SO_4, cool at 2-8°C
11 COD		100 ml	Amber glass bottle	
12 Oil and grease		1000 ml	Glass Bottle	
13 Total P		100 ml	Amber glass bottle	
14 Ammonium N , Phenols		1000 ml	Amber glass bottle	
15 Organotin compounds (OTC)		1000 ml	Amber glass bottle (Acid washed)	1M HCl to pH 2-3 Cool < 6°C
16 VOC , Halogenated Solvents		240 ml	Six x 40 ml amber VOA vial no headspace	HCl < pH 2 cool < 6°C
17 Heavy metals (As, Sb, Sn, Cu, Pb, Zn, Cd, Co, Cr total)		250 ml	Amber glass bottle	pH <2 HNO_3
18 Mercury		500 ml	Amber glass bottle (Acid washed)	HNO3 < pH 2 cool < 6°C
19 Cyanide		1000 ml	Amber glass bottle	NaOH > 12 pH, 0.1 ml of 10% Sodium Thiosulfate, Cool < 6°C
20 Aox		500 ml	Amber glass bottle	0.1 ml of 10% Sodium Thiosulfate, H2SO4 < pH 2, Cool < 6°C
21 E. Coli (bacteria/100ml)		125 ml	Amber glass bottle clean (non -reactive)	0.1 ml of 10% Sodium Thiosulfate, Cool < 6°C do not freeze
22 Cr (VI)		40 ml	Brown Glass VOA vial (Acid washed)	0.45µm filter in field, add buffer * to pH 9.0-9.5 Cool < 6°C
23 Sulphite		100 ml	Amber glass bottle	1 ml 2.5% EDTA, 0.5 g zinc acetate, Cool < 6°C
24 Sulfide		100 ml	Plastic Bottle	4 drops 2N zinc acetate, NaOH > pH 9, Cool < 6°C

HOHENSTEIN

Hohenstein Laboratories Bangladesh Limited

Field Data Sheet (Waste water sample collection)

HOHENSTEIN

E.Qualty Control

Sample type	Action(Y/N)	Amount	Action in lab	Action in field
Field blanks shall be collected for the following parameters (Total -p , Coliform, Mercury , Halogenated solvents , VOC)	Y	500 ml	[illegible] water [illegible] containers identical to sample. One sample is left in the laboratory as a control sample. Two samples are taken to the field one as a field blank and one as a transport blank. The actions in the field are then carried out	Field blank — open container in the field for a similar period of time as is required to take sample. Re cap container and transport to laboratory for analysis
Transport blanks shall be collected for the following parameters (Total -p , Coliform, Mercury , Halogenated solvents , VOC)	Y	500 ml		Transport blank — Carry a sealed sample container in the cooler with other samples. No other action necessary in the field. Return to laboratory for analysis

F. Actual testing time and Maximum Holding time after collection the sample(to be filled in during testing)

Wastewater Parameter	Actual testing Time	Maximum Holding Time
Temperature		15 minutes
TSS		7 days
COD		28 days
Total - N		28 days
pH		6 hours
Colour [m-1](436nm, 525nm, 620nm)		48 hours
BOD5		48 hours
Ammonium-N		28 days
Total-P		28 days
AOX		6 Months
Oil and Grease		28 days
Phenols		28 days
Total Coliform[bacteria/100ml]		24 hours
Persistent foam		Visual
Cyanide		14 days
Sulfide		7 days
Sulfite		48 hours
Trace Metals		6 Months
Chromium (VI)		28 days
Mercury		28 days
AP and APEO		7 days to extract
COC		7 days to extract
Chlorophenols		7 days to extract
Banned Amines (AZO)		7 days to extract
Dyes (Carcinogenic and Disperse)		7 days to extract
Flame Retardants		7 days to extract
Glycols		7 days to extract
Halogenated Solvents		14 days
Organotin Compounds		7 days
PFCs		7 days to extract
PAHs		7 days to extract
VOC		14 days
Sulfate		15 days
Chloride		16 days
Nitrate		17 days
Nitrite		18 days
Chlorine		19 days

15.04.25

Singeture of ZDHC apporoved sampler

Nice Cotton Limited

Nice Cotton Limited

15/03/25

Signeture & stump of Facility Representative person

Declaration for ZDHC Sludge Disposal Pathway C

(Sludge sent to Building Products manufacturing processes operated at temperatures greater than or equal to 1000'C. The ash generated by the incineration process must be incorporated into the building product.) Examples of Building Products in this category can include: concrete, concrete aggregates, ceramics, brick, mortar, stucco, grout, and more).

Reference: ZDHC Sludge Reference document V1.0 and ZDHC Wastewater Guidelines

Manufacturing facility name: Nice Cotton Limited

ZDHC Gateway ID: A557IY48

Location: Holding No-105, South Panishail, Kashimpur, Gazipur.

The undersigned manufacturing facility representative declares the following:

· Our sludge is disposed of in a Building Products manufacturing process operated at temperatures of 1000 C or greater, and that the facility receives our sludge and processes it through their Building Products manufacturing facility.

· That the Building Products manufacturing facility holds the required legal license/authorisation to operate /permit/ other similar documentation that allows the facility to operate and accept the reference sludge and process it through the facility. (Provide copies of the documentation.)
We also declare the following information based on the information received from the facility where our sludge is disposed of and that this information is true and accurate to the best of our knowledge:

Name and address of Building Products manufacturing facility:
M/S. Five star Bricks

Operating temperature and dwell time of the sludge in the Building Products manufacturing process:

Description of the Building Products being manufactured: Brick Manufacture

Use of the Building Products being manufactured: Bricks

Flue gas treatment steps for the process:

Percentage of total Building Products process mass inputs represented by the sludge:

(Signature)
Name and designation of authorised signatory from the textile manufacturing facility:
Md. Abdur Rahman, Asst. Manager- ETP Date:13.04.2025

Nice Cotton Limited

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Dhaka, Bangladesh, 26.04.2025

Head of Textile & Chemical Testing

Johny Yasmin Kanta

Hohenstein Laboratories Bangladesh Limited. Dhaka, Bangladesh

Sr. Manager for Textile

S.M. Imam Uddin

Please contact for any complaint: bd_customerhelp@hohenstein.com