LAB REPORT

Report Number	(6624)232-0505		
Date of sampling	August 19, 2024		
Reporting Date	August 29, 2024		
Factory Company Name	Zhejiang Shan'e Knitting Co., Ltd		
Factory Address	No. 33 Suhe Road, Suxi Town, Yiwu City, Zhejiang Province, China		
Discharge Type	Indirect Discharge with Pretreatment		
Discharge Destination Name & Address	Jiangdong Operations Department of Water Treatment Company		
Average total industrial wastewater generated	Equal or more than 15m^3 per day	**Manufacturing Process Type**	Textile
Onsite ETP / Pretreatment	Yes	**Homogenization Tank & Holding Time**	Yes (untreated & effluent), >12 hours
ZDHC Sampler ID	C74D106818233		
Sample Type & Description & Sampling Method	Untreated wastewater	I001, brown liquid, grab sample at 10:35	
	Effluent	I002, light purple liquid, grab sample at 11:10	
	Sludge	I003, black solid, composite sample at 10:47	

Local Legal Data / Contractual agree by CETP Data	
Local Legal Standard Name / Name of Contractual agree by CETP[a]	Indirect Emission Limits for Nitrogen and Phosphorus Pollutants from Industrial Enterprise Wastewater, Emission Standards for Water Pollutants in Textile Dyeing and Finishing Industry, Integrated Wastewater Discharge Standard, Water Quality Qtandards for Sewage Discharged Into Urban Sewers
Standard Number	DB33/887-2013, GB 4287-2012, GB8978-1996, GB/T 31962-2015
Parameters (ZDHC WWG V2.1, Table 2 & 3) exceeded local legal standard / contractual agree by CETP standard	No exceeded
Discharge permit provided	Yes

Result Overview			
Wastewater Overall Result (ZDHC WWG V2.1, Table 1)	Not detected		
Wastewater Overall Result (ZDHC WWG V2.1, Table 2 & 3)	Not applicable		
Sludge Disposal Pathway	A	**Sludge Overall Result**	Meet Sludge Disposal Pathway (sample & report)

Bureau Veritas Consumer Products Services, Inc. (Shanghai)
No. 168, GuangHua Road, Zhuanqiao Town,
Minhang, Shanghai, China. Post Code:201108
Tel: 86-21-24081888; Fax: 86-21-64890042

Internal Description			
Sample reference number	(6624)232-0505		
Date & time of the beginning of sampling	August 19, 2024	,	10:00
Date & time of the end of sampling	August 19, 2024	,	14:00
Sample received date	August 20, 2024		
Testing period	August 20, 2024	to	August 29, 2024
Arrival temperature at laboratory	6.58 °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:

General enquiry and invoicing Mr. Henry Chen
Email: henry.chen@bureauveritas.com; Tel: (021) 24081953

Technical enquiry Mr. Steven Han
Email: steven-z.han@bureauveritas.com; Tel: (021) 24081838

Report reviewed by

Amy Feng

Report approved by

Aten Wu, Technical Support

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		

Wastewater Result Summary - ZDHC Heavy Metals Parameters

ZDHC Heavy Metals Wastewater	Effluent I002		
Antimony	NA		
Chromium (VI)	DATA		
Barium	NA		
Selenium	NA		
Tin	NA		
Arsenic	DATA		
Total Chromium	NA		
Cobalt	NA		
Cadmium	DATA		
Copper	NA		
Lead	DATA		
Nickel	NA		
Silver	NA		
Zinc	NA		
Mercury	DATA		

Wastewater Result Summary - ZDHC Conventional and Anions Parameters

ZDHC Conventional and Anions Wastewater	Effluent I002		
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		

Sludge Result Summary - ZDHC Sludge Parameters

Sludge Parameters	Sludge I003		
Antimony	DATA		
Arsenic	DATA		
Barium	DATA		
Cadmium	DATA		
Cobalt	DATA		
Copper	DATA		
Lead	DATA		
Nickel	DATA		
Selenium	DATA		
Silver	DATA		
Total Chromium	DATA		
Zinc	DATA		
Chromium (VI)	DATA		
Mercury	DATA		
pH	DATA		
% Solids	DATA		
Paint Filter Test	DATA		
Fecal Coliform	DATA (S)		
AP and APEOs: including all isomers	DATA		
Polycyclic Aromatic Hydrocarbons (PAHs)	DATA		
Chlorotoluenes	DATA		
Cyanide	DATA		

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 - Bureau Veritas Science and Technology Service (Xi'an) Co., Ltd			
*	=	See remark			

Wastewater Test Result - ZDHC MRSL

1A) AP and APEOs: including all isomers

NP/OP: ASTM D7065 LC-MS; OPEO/NPEO (n>2): ASTM D7742

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; USEPA 8270E Solvent extraction followed by GC-MS

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 with GC-MS(NCI); ISO 12010:2019 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 8270E 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

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
2-chlorophenol	95-57-8	0.5	ND			µg/L
3-chlorophenol	108-43-0	0.5	ND			µg/L
4-chlorophenol	106-48-9	0.5	ND			µg/L
2,3-dichlorophenol	576-24-9	0.5	ND			µg/L
2,4-dichlorophenol	120-83-2	0.5	ND			µg/L
2,5-dichlorophenol	583-78-8	0.5	ND			µg/L
2,6-dichlorophenol	87-65-0	0.5	ND			µg/L
3,4-dichlorophenol	95-77-2	0.5	ND			µg/L
3,5-dichlorophenol	591-35-5	0.5	ND			µg/L
2,3,4-trichlorophenol	15950-66-0	0.5	ND			µg/L
2,3,5-trichlorophenol	933-78-8	0.5	ND			µg/L
2,3,6-trichlorophenol	933-75-5	0.5	ND			µg/L
2,4,5-trichlorophenol	95-95-4	0.5	ND			µg/L
2,4,6-trichlorophenol	88-06-2	0.5	ND			µg/L
3,4,5-trichlorophenol	609-19-8	0.5	ND			µg/L
2,3,5,6-tetrachlorophenol	935-95-5	0.5	ND			µg/L
2,3,4,6-tetrachlorophenol	58-90-2	0.5	ND			µg/L
2,3,4,5-tetrachlorophenol	4901-51-3	0.5	ND			µg/L
Pentachlorophenol (PCP)	87-86-5	0.5	ND			µg/L

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

EPA 8270E

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Dimethyl formamide; N,N-dimethylformamide (DMFa)[a]	68-12-2	1000	ND			µg/L

1G) Dyes - Carcinogenic or Equivalent Concern

Liquid extraction, LC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Basic violet 3 with >0.1% of Michler's Ketone	548-62-9	500	ND			µg/L
C.I. Acid Red 26	3761-53-3	500	ND			µg/L
C.I. Acid Violet 49	1694-09-3	500	ND			µg/L
C.I. Basic Blue 26 (with Michler's Ketone >0/1%)	2580-56-5	500	ND			µg/L
C.I. Basic Green 4 (Malachite Green Chloride)	569-64-2	500	ND			µg/L

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

USEPA 8270E, 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, LC-MS 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-methyloxypropylacetate	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

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 componuds (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	105			µg/L
Silica (used in sand blasting)[d]	14464-46-1	-	NA			µg/L

1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)

FTOH: EPA 8270; PFCs: LC-MSMS

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, 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 liearalkyl esters, C7-rich (DIHP)	71888-89-6, 84777-06-0	10	ND			µg/L
1,2-benzenedicarboxylic acid, di-C7-11 branched and liearalkyl 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; 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

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-dimethoxylbenzidine	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-diaminoanisole 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, Dichloromethane extraction GC-MS

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec- butyl) phenol (UV-350)	36437-37-3	100	ND			µg/L
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	100	ND			µg/L
2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320)	3846-71-7	100	ND			µg/L
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	100	ND			µg/L

1T) Volatile Organic Compounds (VOC)

USEPA 8260D, EPA 8270

Test Parameters	CAS Number	Reporting limit & LOQ	Result of Test Items			Unit
			Untreated I001			
Benzene	71-43-2	1	ND			µg/L
m-cresol	108-39-4	1	ND			µg/L
o-cresol	95-48-7	1	ND			µg/L
p-cresol	106-44-5	1	ND			µg/L
Xylene	1330-20-7	1	ND			µg/L
Toluene[a]	108-88-3	1	ND			µg/L

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.

Report Number (6624)232-0505

Wastewater Test Result - ZDHC Heavy Metals

Wastewater - ZDHC Heavy Metals

EPA 3015A, 6020A; 3051A; GB/T 7467-1987

Test Parameters	Reporting limit & LOQ	Limit				Result of Test Items			Unit
		Foundational	Progressive	Aspirational	Local Legal Standard / Contractual agree with CETP Standard	Effluent I002			
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	-	NA			mg/L
Cobalt	0.01	0.05	0.02	0.01	-	NA			mg/L
Cadmium	0.01	0.1	0.05	0.01	-	ND			mg/L
Copper	0.25	1	0.5	0.25	-	NA			mg/L
Lead	0.01	0.1	0.05	0.01	-	ND			mg/L
Nickel	0.05	0.2	0.1	0.05	-	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

Report Number (6624)232-0505

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 I002		
pH[f]	HJ 1147-2020	-	6-9	6-9	6-9	-	NA		-
Temperature difference[f]	GB/T 13195-1991	-	15	10	5	-	NA		Δ °C
E.coli	SM 9221B, SM 9221F	126	126	126	126	-	NA		MPN/100-ml
Colour (436 nm)	ISO 7887-B:2011	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	HJ 535-2009	0.5	10	1	0.5	-	NA		mg/L
AOX	HJ/T 83-2001	0.1	3	0.5	0.1	-	NA		mg/L
BOD_5	HJ 505-2009	8	30	15	8	-	NA		mg/L
COD	HJ 828-2017	40	150	80	40	-	NA		mg/L
DO[f]	HJ 506-2009	-	Sample & Report	Sample & Report	Sample & Report	-	NA		mg/L
Oil & Grease	HJ 637-2018	0.5	10	2	0.5	-	NA		mg/L
Total Phenols / Phenol Index	HJ 503-2009	0.001	0.5	0.01	0.001	-	NA		mg/L
Total Chlorine[f]	HJ 585-2010, HJ 586-2010	0.1	Sample & Report	Sample & Report	Sample & Report	-	NA		mg/L
TDS	GB/T 5750.4-2006	5	Sample & Report	Sample & Report	Sample & Report	-	NA		mg/L
Total Nitrogen	HJ 636-2012	5	20	10	5	-	NA		mg/L
Total Phosphorus	GB/T 11893-1989	0.1	3	0.5	0.1	-	NA		mg/L
TSS	GB/T 11901-1989	5	50	15	5	-	NA		mg/L

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 CETP Standard	Effluent I002		
Chloride	HJ 84-2016	0.007	Sample & Report	Sample & Report	Sample & Report	-	NA		mg/L
Cyanide, total	HJ 484-2009	0.05	0.2	0.1	0.05	-	NA		mg/L
Sulfate	HJ 84-2016	0.018	Sample & Report	Sample & Report	Sample & Report	-	NA		mg/L
Sulfide	HJ 1226-2021	0.01	0.5	0.05	0.01	-	NA		mg/L
Sulfite	HJ 84-2016	0.2	2	0.5	0.2	-	NA		mg/L

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Sludge Test Result - Metals & Conventional and Anions & MRSL

Sludge - Metals

EPA 3050,EPA 3051A, EPA 6020A, EPA 6020B,USEPA 7196

Test Parameters	Sludge Reporting limit & LOQ	Limit			Result of Test Items			Unit
		Total Metals and Anions Threshold Values			Sludge I003			
Antimony	5	12			**27.9**			mg/kg
Arsenic	5	10			**10.9**			mg/kg
Barium	200	700			ND			mg/kg
Cadmium	1	3			ND			mg/kg
Cobalt	400	1600			ND			mg/kg
Copper	50	200			75.7			mg/kg
Lead	5	10			**10.7**			mg/kg
Nickel	20	70			ND			mg/kg
Selenium	5	10			ND			mg/kg
Silver	50	100			ND			mg/kg
Total Chromium	50	100			**1727**			mg/kg
Zinc	400	1000			**1491.2**			mg/kg
Chromium (VI)	20	50			ND			mg/kg
Mercury	1	1			ND			mg/kg

Sludge (Leachate) - Metals

HJ/T 300,EPA 3015A, EPA 6020A, GB 7467,EPA 6020B

Test Parameters	Reporting limit & LOQ	Limit			Result of Test Items			Unit
		Leachate Limit			Leachate			
Antimony	0.6	-			ND			mg/L
Arsenic	0.5	-			ND			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	-			ND			mg/L
Nickel	3.5	-			NA			mg/L
Selenium	0.5	-			NA			mg/L
Silver	5	-			NA			mg/L
Total Chromium	5	-			6.992			mg/L
Zinc	50	-			ND			mg/L
Chromium (VI)	2.5	-			NA			mg/L
Mercury	0.05	-			NA			mg/L

Sludge - Conventional

Test Parameters	Test Method	Reporting limit & LOQ	Limit		Result of Test Items			Unit
			Sludge Reporting Limit	Limits for specific disposal pathway	Sludge I003			
pH	HJ 962-2018	-	-	Sample &report	7.82			-
% Solids	HJ 613-2011	-	-	Sample &report	38.8			%
Fecal Coliform	EPA 1681	-	-	Sample &report	19			MPN/g
Paint Filter Test	EPA 9095B	-	-	Sample &report	Pass			-

Sludge - AP and APEOs: including all isomers

USEPA 3550C,ASTM D7065, ISO 18254-1, ASTM D7742

Test Parameters	CAS Number	Limit		Result of Test Items			Unit
		Sludge Reporting Limit & LOQ	Limits for specific disposal pathway	Sludge I003			
NPEO	9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	0.4	Sample &report	ND			mg/kg
NP, mixed isomers	104-40-5, 11066-49-2, 25154-52-3, 84852-15-3			ND			mg/kg
OPEO	9002-93-1, 9036-19-5, 68987-90-6			ND			mg/kg
OP, mixed isomers	140-66-9, 1806-26-4, 27193-28-8			ND			mg/kg

Sludge - Chlorotoluenes

USEPA 3550, EPA 8270E,HJ 605-2011

Test Parameters	CAS Number	Limit		Result of Test Items			Unit
		Sludge Reporting Limit & LOQ	Limits for specific disposal pathway	Sludge I003			
Chlorotoluenes	Multiple	0.2	Sample &report	ND			mg/kg

Sludge - Polycyclic Aromatic Hydrocarbons (PAHs)

USEPA 3550, EPA 8270E,HJ 805-2016

Test Parameters	CAS Number	Limit		Result of Test Items			Unit
		Sludge Reporting Limit & LOQ	Limits for specific disposal pathway	Sludge I003			
Acenaphthene	83-32-9	0.2	Sample &report	ND			mg/kg
Acenaphthylene	208-96-8			ND			mg/kg
Anthracene	120-12-7			ND			mg/kg
Benzo[a]anthracene	56-55-3			ND			mg/kg
Benzo[a]pyrene (BaP)	50-32-8			ND			mg/kg
Benzo[b]fluoranthene	205-99-2			ND			mg/kg
Benzo[e]pyrene	192-97-2			ND			mg/kg
Benzo[ghi]perylene	191-24-2			ND			mg/kg
Benzo[j]fluoranthene	205-82-3			ND			mg/kg
Benzo[k]fluoranthene	207-08-9			ND			mg/kg
Chrysene	218-01-9			ND			mg/kg
Dibenz[a,h]anthracene	53-70-3			ND			mg/kg
Fluoranthene	206-44-0			ND			mg/kg
Fluorene	86-73-7			ND			mg/kg
Indeno[1,2,3-cd]pyrene	193-39-5			ND			mg/kg
Naphthalene	91-20-3			ND			mg/kg
Phenanthrene	85-01-8			ND			mg/kg
Pyrene	129-00-0			ND			mg/kg

Sludge - Anions

HJ 745-2015

Test Parameters	Limit				Result of Test Items			Unit
	Sludge Reporting Limit & LOQ	Limits for specific disposal pathway			Sludge I003			
Cyanide	20	Sample &report			ND			mg/kg

Appendix A - Discharge limit according to regulation

当前位置：水污染物排放信息审核

1、废水污染物排放许可限值

（1）主要排放口

排放口编号	排放口名称	污染物种类	许可排放浓度限值（mg/L）
DW001	生产废水排放口	pH值	6-9mg/L
DW001	生产废水排放口	五日生化需氧量	50mg/L
DW001	生产废水排放口	可吸附有机卤化物	12mg/L
DW001	生产废水排放口	色度	80
DW001	生产废水排放口	悬浮物	100mg/L
DW001	生产废水排放口	苯胺类	1.0mg/L
DW001	生产废水排放口	总磷（以P计）	1.5mg/L
DW001	生产废水排放口	总氮（以N计）	30mg/L
DW001	生产废水排放口	化学需氧量	200mg/L
DW001	生产废水排放口	二氧化氯	0.5mg/L
DW001	生产废水排放口	氨氮（NH3-N）	20mg/L
DW001	生产废水排放口	硫化物	0.5mg/L
DW001	生产废水排放口	流量	/
DW001	生产废水排放口	总锑	0.1mg/L
主要排放口合计			CODcr
			氨氮

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

I001 - Untreated wastewater

Sampling point
19/08/2024, 10:35

Sampling point surrounding environment
19/08/2024, 10:35

Labelled sample bottles
19/08/2024, 10:35

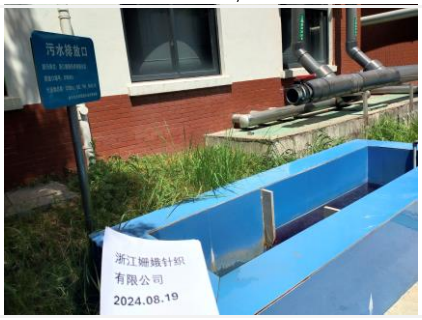
Sample for phthalate test
19/08/2024, 10:35

Sample packaging
19/08/2024, 14:00

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

I002 - Effluent

Sampling point
19/08/2024, 11:10



Sampling point surrounding environment
19/08/2024, 11:10

Labelled sample bottles
19/08/2024, 11:10

pH measurement
19/08/2024, 11:10

Sample packaging
19/08/2024, 14:00

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

I003 - Sludge

Sampling point
19/08/2024, 10:47

Sampling point surrounding environment
19/08/2024, 10:47

Labelled sample bottles
19/08/2024, 10:47

Sample packaging
19/08/2024, 14:00

Report Number (6624)232-0505

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:	
Version No.: 1	
Business Line: Analytical	

Attach the completed field data form in the test report.

Facility Information			
Date of Sampling:	2024.08.9		
Sample Number / Test Report Number (ZDHC Composite Sample Code):	66242320505		
Facility Name:	浙江姗娥针织有限公司		
Facility Address:	浙江省义乌市苏溪镇杏和路33号		
Facility Type (tick all applicable):	☑ Dyeing and Finishing ○ Laundry, Washing and Finishing ○ Printing ○ Other (please specify)	○ Fabric Mill ○ Natural Leather processing ○ Synthetic Leather processing	
Discharge Type (tick applicable):	○ Direct discharge ☑ Indirect discharge ○ Zero liquid discharge (ZLD)	☑ with pre-treatment ○ without pre-treatment ☑ with own ETP	Other Notes:
Discharge Description:	○ Discharge to environment (e.g. river, stream, sea etc.) ☑ Sewage treatment plant	○ Other (please specify)	
Discharge Volume:	☑ ≥ $15m^3$ per day	○ < $15m^3$ per day	

Sample Type and Details				
Sample Type	**Sample Details**			
○ Incoming Water	--			
☑ Untreated WW	☑ with equalisation tank (EQT) present 高浓度污水调节池：2000m³，低浓度污水调节池：2000m³， Hydraulic Retention Time (HRT) (Hours): ______ 总进水量：1000t/h， = volume of tank (m^3) / flow rate (m^3/h) If HRT > 12 h, grab sampling from EQT is allowed.			
☑ Effluent	○ Direct Enter sampling time(s) in page 2 and take field test measurements.	☑ Indirect Enter sampling time(s) in page 2. No field test measurements required except on client's request.	☑ Facility has WWTP ☑ Plant is in operating condition	○ with equalisation tank (EQT) present 调节池：800m³， Hydraulic Retention Time (HRT) (Hours): 日排水：1000m³，其它回用 = volume of tank (m^3) / flow rate (m^3/h) If HRT > 12 h, grab sampling from EQT is allowed.
☑ Sludge	Disposal Pathway (The pathway must be defined by the facility. If the facility cannot provide information, pathway "F" shall be assumed.) ☑ A >1000°C offsite incineration ○ B Landfill with significant control ○ C Building products processed >1000°C ○ D Landfill with limited control ○ E Incineration/ Building products processed <1000°C ○ F Landfill with no control ○ G Land application Sludge flux (weight/time) if applicable:			

ZDHC Wastewater Sampling - Facility Confirmation

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.
In no circumstances shall samples be taken during times when the production process is not running or the wastewater is diluted, for example due to heavy rainfall.

Facility Confirmation		Sampler Information	
Facility Name:	浙江姗娥针织有限公司	Sampler's Name/ Email:	[illegible]
Facility Representative Name:		Sampler's ZDHC Accredited No.:	/
Facility Representative Signature and Stamp:	何雁菲 (stamp: 浙江姗娥针织有限公司 人力资源部)	Sampler's Signature:	[illegible]
Date:	2024.08.19	Date:	2024.08.9

ZDHC采样记录打印纸 Page 1 of 2

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

ZDHC Wastewater Sampling Field Data Form and Representative Sample Declaration

CPSD-AN-00613-DATA 07	
Issue Date:	
Version No.: 1	
Business Line: Analytical	

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	○ Composite Sample	○ Grab Sample	Start Time:	Stop Time:
Sampling Locations:	GPS coordinates:	Lat.: N / S	Long.: E / W	
Sampling Mode:	○ Manual	○ 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	○ Composite Sample	☑ Grab Sample	Start Time: 10:00	Stop Time: 14:00
Sampling Locations:	GPS coordinates:	Lat.: N ~~/S~~ 29°23'54.37"	Long.: E ~~/W~~ 120°8'14.59"	
Sampling Mode:	☑ Manual	○ Autosampler - Sampling Device Description/ Owner:		

Sampling Time (Hours)	0	1	2	3	4	5	6	Average
Recording time of discrete sample	10:35							--
Colour (visual estimation):	[illegible]							

Effluent Sample Point	○ Composite Sample	☑ Grab Sample	Start Time: 10:00	Stop Time: 14:00
Sampling Locations:	GPS coordinates:	Lat.: N ~~/S~~ 29°23'52.29"	Long.: E ~~/W~~ 120°8'15.33"	
Sampling Mode:	☑ Manual	○ Autosampler - Sampling Device Description/ Owner:		

Sampling Time (Hours)		0	1	2	3	4	5	6	Average
Recording time of discrete sample		11:10							--
Temperature (°C):	WW Discharge	35.8							
	Receiving Water	/							
pH:		7.3							
Dissolved Oxygen (mg/L):		5.35							
Total Chlorine (mg/L):		0.34							
Persistent Foam (Yes/ No):		Yes / No ☑	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No	Yes / No
Wastewater Flow Meter (L/min):		1000 m³/day							
Alternate Measured Flow:	Depth (cm)	/							
	Velocity (cm/sec)	/							
Colour (visual estimation):		[illegible]							
Volume collected (L):		750ml							
Total volume collected (L):		750ml		Collect 3.33-litres each hour for a total minimum volume of 20-litres					

Sludge Sample Point	○ Composite Sample		Start Time: 10:00	Stop Time: 14:00
Sampling Locations	GPS coordinates:	Lat.: N ~~/S~~ 29°23'52.18"	Long.: E ~~/W~~ 120°8'13.28"	
Sampling Mode	☑ Manual	○ Autosampler - Sampling Device Description/ Owner:		

Sampling Time (Hours)	0	1	2	3	4	5	6	Average
Recording time of discrete sample	10:47							--
Colour (visual estimation):	黑色							

Comments/ Other Observations

[illegible]

ZDHC采样记录打印纸

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END OF REPORT