Test Report: (6823)079-0228

Report Date: April 08, 2023

Factory Company Name:	IRIS Fabrics Ltd. (ETP: 2)		
Factory Address:	Zirani Bazar, Kashimpur, Gazipur, 1349, Bangladesh.		
Sampling Method & Description:	I001) Untreated wastewater	Composite	Blue / reddish color liquid
	I002) Effluent	Composite	Lt. blue color liquid
	I003) Sludge	Composite	Black color mud
	I004) Leachate	-	Not tested
	I005) Incoming water	-	Not tested
Discharge Type:	**Direct Discharge**		
On-site ETP / Pretreatment:	Yes	Homgenization Tank & Holding Time:	Yes & More Than 12 Hours
Discharge Destination:	Government canal		
Permit Validation Date:	/		
Conventional, Anions & Heavy Metals Overall Category:	Foundational	ZDHC MRSL Parameters:	Not detected
Sludge Parameters:	Meet ZDHC Threshold Value		
Sample Pick Up Date:	March 19, 2023	Sampler Number:	C74D106817431
Test Period:	March 19, 2023 to April 08, 2023		
Parameter(s) exceeded maximum holding time:	Not exceeded		

Remark

The results of this report shall not be used for any regulatory compliance purposes.

Type of Process:	**Textile**	Average total industrial wastewater generated:	**Equal or more than 15m3/day**
Sludge Disposal Pathway:	Disposal Pathway A		
Type of Sludge:	Mud		

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BUREAU VERITAS
CONSUMER PRODUCTS SERVICES (BANGLADESH) LTD.

Report approved by:

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

Test Report: (6823)079-0228

Report Date: April 08, 2023

Result Summary - ZDHC MRSL Wastewater Parameters

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

Test Report: (6823)079-0228

Report Date: April 08, 2023

Result Summary - ZDHC Heavy Metals, Conventional and Anions Wastewater Parameters

Test Items	Untreated wastewater	Effluent	Incoming water
Antimony	NR	Meet	NR
Chromium (VI)		Meet	NR
Barium		Refer to result	NR
Selenium		Refer to result	NR
Tin		Refer to result	NR
Arsenic		Meet	NR
Total Chromium		Meet	NR
Cobalt		Meet	NR
Cadmium		Meet	NR
Copper		Meet	NR
Lead		Meet	NR
Nickel		Meet	NR
Silver		Meet	NR
Zinc		Meet	NR
Mercury		Meet	NR
pH		Meet	NR
Temperature difference		Meet	
E.coli		Meet	
Colour		Meet	
Persistent Foam		Meet	
Wastewater Flowrate		Refer to result	
Ammonium-Nitrogen		Meet	
AOX		Meet	
BOD_5		Meet	
COD		Meet	
DO		Refer to result	
Oil & Grease		Meet	
Total Phenols / Phenol Index		Meet	
Total Chlorine		Refer to result	
TDS		Refer to result	
Total Nitrogen		Meet	
Total Phosphorus		Meet	
TSS		Meet	
Chloride		Refer to result	
Cyanide, total		Meet	
Sulfate		Refer to result	
Sulfide		Meet	
Sulfite		Meet	

Test Report: (6823)079-0228

Report Date: April 08, 2023

Result Summary - ZDHC Sludge Parameters

Test Items	Sludge	Leachate
Antimony	ND	NR
Arsenic	ND	NR
Barium	ND	NR
Cadmium	ND	NR
Coblat	ND	NR
Copper	ND	NR
Lead	ND	NR
Nickel	ND	NR
Selenium	ND	NR
Silver	ND	NR
Total Chromium	ND	NR
Zinc	ND	NR
Chromium (VI)	ND	NR
Mercury	ND	NR
Cyanide	Refer to result	NR
pH	Refer to result	
% Solids	Refer to result	
Paint Filter Test	Refer to result	
Fecal Coliform	Refer to result	
AP and APEOs	ND	
PAHs	ND	
Chlorotoluenes	ND	

Note / Key:

Meet	=	Meet Foundational Limit / Meet Discharge Criteria
Not Meet	=	Exceed Foundational Limit / Exceed Discharge Criteria
NR	=	Not requested / Not required
NA	=	Not applicable
D	=	Detected
ND	=	Not detected
Refer to result	=	Legal parameter(s) and/or parameter(s) requested by factory, plesae refer to test result
--	=	The facility have same Raw Wastewater & Sludge source but it has two different E.T.P that's why Raw Wastewater & Sludge data has been taken / collected from report no.: (6823)079-0224 which sampling also conducted on same day.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC MRSL Parameters

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001	I002	I003#	I004#	I005	Wastewater	Sludge#	Leachate#
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(µg/L)	(mg/kg)	-
1A) AP and APEOs: including all isomers								
NPEO	ND	NR	ND	NR	NR	5	0.4	-
NP, mixed isomers	ND		ND		NR			
OPEO	ND		ND		NR			
OP, mixed isomers	ND		ND		NR			
1B) Anti-Microbials & Biocides								
o-Phenylphenol (+salts)	ND	NR	NR	NR	NR	100	-	-
Triclosan	ND				NR			
Permethrin	ND				NR	500		
1C) Chlorinated Parafins								
MCCPs (C14-C17)	ND	NR	NR	NR	NR	500	-	-
SCCPs (C10-C13)	ND				NR	25		
1D) Chlorobenzenes and Chlorotoluenes								
1,2-dichlorobenzene	ND	NR	NR	NR	NR	0.2	-	-
Other isomers of mono-, di-, tri-, tetra-, penta- and hexa- chlorobenzene	ND				NR			
Other isomers of mono-, di-, tri-, tetra- and penta- chlorotoluene	ND		ND		NR		0.2	
1E) Chlorophenols								
2-chlorophenol	ND	NR	NR	NR	NR	0.5	-	-
3-chlorophenol	ND				NR			
4-chlorophenol	ND				NR			
2,3-dichlorophenol	ND				NR			
2,4-dichlorophenol	ND				NR			
2,5-dichlorophenol	ND				NR			
2,6-dichlorophenol	ND				NR			
3,4-dichlorophenol	ND				NR			
3,5-dichlorophenol	ND				NR			
2,3,4-trichlorophenol	ND				NR			
2,3,5-trichlorophenol	ND				NR			
2,3,6-trichlorophenol	ND				NR			
2,4,5-trichlorophenol	ND				NR			
2,4,6-trichlorophenol	ND				NR			
3,4,5-trichlorophenol	ND				NR			
2,3,5,6-tetrachlorophenol	ND				NR			
2,3,4,6-tetrachlorophenol	ND				NR			
2,3,4,5-tetrachlorophenol	ND				NR			
Pentachlorophenol (PCP)	ND				NR			
1F) N,N-di-methylformamide (DMFa)								
Dimethyl formamide; N,N-dimethylformamide (DMFa)[a]	ND	NR	NR	NR	NR	1000	-	-

a = Report only for mock leather

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001	I002	I003#	I004#	I005	Wastewater	Sludge#	Leachate#
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(µg/L)	(mg/kg)	-
1G) Dyes - Carcinogenic or Equivalent Concern								
Basic violet 3 with >0.1% of Michler's Ketone	ND	NR	NR	NR	NR	500	-	-
C.I. Acid Red 26	ND				NR			
C.I. Acid Violet 49	ND				NR			
C.I. Basic Blue 26 (with Michler's Ketone >0/1%)	ND				NR			
C.I. Basic Green 4 (Malachite Green Chloride)	ND				NR			
C.I. Basic Green 4 (Malachite Green Oxalate)	ND				NR			
C.I. Basic Green 4 (Malachite Green)	ND				NR			
C.I. Basic Red 9	ND				NR			
C.I. Basic Violet 14	ND				NR			
C.I. Direct Black 38	ND				NR			
C.I. Direct Blue 6	ND				NR			
C.I. Direct Red 28	ND				NR			
C.I. Disperse Blue 1	ND				NR			
C.I. Disperse Blue 3	ND				NR			
Disperse Orange 11	ND				NR			
1H) Dyes - Disperse (Allergenic)								
Disperse Blue 102	ND	NR	NR	NR	NR	50	-	-
Disperse Blue 106	ND				NR			
Disperse Blue 124	ND				NR			
Disperse Blue 26	ND				NR			
Disperse Blue 35 (CAS 12222-75-2)	ND				NR			
Disperse Blue 35 (CAS 56524-77-7)	ND				NR			
Disperse Blue 7	ND				NR			
Disperse Brown 1	ND				NR			
Disperse Orange 1	ND				NR			
Disperse Orange 3	ND				NR			
Disperse Orange 37/59/76	ND				NR			
Disperse Red 1	ND				NR			
Disperse Red 11	ND				NR			
Disperse Red 17	ND				NR			
Disperse Yellow 1	ND				NR			
Disperse Yellow 3	ND				NR			
Disperse Yellow 39	ND				NR			
Disperse Yellow 49	ND				NR			
Disperse Yellow 9	ND				NR			
1I) Dyes - Navy Blue Colourant								
Component 1: C39H23Cl-CrN7O12S 2Na	ND	NR	NR	NR	NR	500	-	-
Component 2: C46H-30CrN10O20S2 3Na	ND				NR			

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001	I002	I003#	I004#	I005	Wastewater	Sludge#	Leachate#
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(µg/L)	(mg/kg)	-
1J) Flame Retardants								
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	ND	NR	NR	NR	NR	25	-	-
Dis(2,3-dibromopropyl) phosphate (BIS)	ND				NR			
Decabromophenyl ether (DecaBDE)	ND				NR			
Hexabromocyclodecane (HBCDD)	ND				NR			
Octabromodiphenyl ether (OctaBDE)	ND				NR			
Pentabromodiphenyl ether (PentaBDE)	ND				NR			
Polybromobiphenyls (PBB)	ND				NR			
Tetrabromobisphenol A (TBBPA)	ND				NR			
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	ND				NR			
Tris(1-aziridinyl)phosphone oxide (TEPA)	ND				NR			
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	ND				NR			
Tris(2-chloroethyl) phosphate (TCEP)	ND				NR			
Tris(2,3-dibromopropyl) phosphate (TRIS)	ND				NR			
Decabromobiphenyl (DecaBB)	ND				NR			
Dibromobiphenyls (DiBB)	ND				NR			
Octabromobiphenyls (OctaBB)	ND				NR			
Dibromopropylether	ND				NR			
Heptabromodiphenyl ether (HeptaBDE)	ND				NR			
Hexabromodiphenyl ether (HexaBDE)	ND				NR			
Monobromobiphenyls (MonoBB)	ND				NR			
Monobromodiphenylethers (MonoBDEs)	ND				NR			
Nonabromobiphenyls (NonaBB)	ND				NR			
Nonabromodiphenyl ether (NonaBDE)	ND				NR			
Tetrabromodiphenyl ether (TetraBDE)	ND				NR			
Tribromophenylethers (TriBDEs)	ND				NR			
Boric acid[b]	ND				NR	100		
Diboron trioxide[b]	ND				NR			
Disodium octaborate[b]	ND				NR			
Disodium tetraborate anhydrous[b]	ND				NR			
Tetraboron disodium heptaoxide, hydrate[b]	ND				NR			
1K) Glycols / Glycol Ethers								
2-ethoxyethanol	ND	NR	NR	NR	NR	50	-	-
2-ethoxyethyl acetate	ND				NR			
2-methoxyethanol	ND				NR			
2-methoxyethylacetate	ND				NR			
2-methyloxypropylacetate	ND				NR			
Bis(2-methoxyethyl)-ether	ND				NR			
Ethylene glycol dimethyl ether	ND				NR			
Triethylene glycol dimethyl ether	ND				NR			
1L) Halogenated Solvents								
1,2-dichloroethane	ND	NR	NR	NR	NR	1	-	-
Methylene chloride	ND				NR			
Tetrachloroethylene	ND				NR			
Trichloroethylene	ND				NR			

b = Limit refers to elemental boron, not the salt.

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001	I002	I003#	I004#	I005	Wastewater	Sludge#	Leachate#
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(µg/L)	(mg/kg)	-
1M) Organotin Compounds								
Dipropyltin compounds (DPT)	ND	NR	NR	NR	NR	0.01	-	-
Mono, di-, and tri-butyltin derivatives	ND				NR			
Mono, di-, and tri-methyltin derivatives	ND				NR			
Mono, di-, and tri-octyltin derivatives	ND				NR			
Mono, di-, and tri-phenyltin derivatives	ND				NR			
Tetrabutyltin componuds (TeBT)	ND				NR			
Tripropyltin compounds (TPT)	ND				NR			
Tetraoctyltin compounds (TeOT)	ND				NR			
Tricyclohexyltin (TCyHT)	ND				NR			
Tetraethyltin compounds (TeET)	ND				NR			
1N) Other / Miscellaneous Chemicals								
AEEA [2-(2-aminoethylamino)ethanol]	ND	NR	NR	NR	NR	500	-	-
Bisphenol A	ND				NR	10		
Thiourea	ND				NR	50		
Quinoline	ND				NR			
Borate, zinc salt[c]	ND				NR	100		
Silica (used in sand blasting)[d]	NR				NR	-		
1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)								
Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA)	ND	NR	NR	NR	NR	0.01	-	-
Perfluorooctanoic acid (PFOA) related substances	ND				NR	1		
1P) Phthalates - including all other esters of ortho-phthalic acid								
1,2-benzenedicarboxylic acid, di-C6-8 branched and liearalkyl esters , C7-rich (DIHP)	ND	NR	NR	NR	NR	10	-	-
1,2-benzenedicarboxylic acid, di-C7-11 branched and liearalkyl esters (DHNUP)	ND				NR			
Bis(2-methoxyethyl)phthalate (DMEP)	ND				NR			
Butyl benzyl phthalate (BBP)	ND				NR			
Di-cyclohexyl phthalate (DCHP)	ND				NR			
Di-iso-decyl phthalate (DIDP)	ND				NR			
Di-iso-octyl phthalate (DIOP)	ND				NR			
Di-iso-butyl phthalate (DIBP)	ND				NR			
Di-iso-nonyl phthalate (DINP)	ND				NR			
Di-n-hexyl phthalate (DnHP)	ND				NR			
Di-n-octyl phthalate (DNOP)	ND				NR			
Di-n-pentylphthalates	ND				NR			
Di-n-propyl phthalate (DPRP)	ND				NR			
Di(ethylhexyl) phthalate (DEHP)	ND				NR			
Dibutyl phthalate (DBP)	ND				NR			
Diethyl phthalate (DEP)	ND				NR			
Diisopentylphthalates	ND				NR			
Dinonyl phthalate (DNP)	ND				NR			

c = Limit refers to elemental boron and/or zinc, not the salt.

d = Not a ZDHC wastewater parameter, and not required to test this parameter as this is related to sand blasting

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001	I002	I003#	I004#	I005	Wastewater	Sludge#	Leachate#
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(µg/L)	(mg/kg)	-
1Q) Polycyclic Aromatic Hydrocarbons (PAHs)								
Acenaphthene	ND	NR	ND	NR	NR	1	0.2	-
Acenaphthylene	ND		ND		NR			
Anthracene	ND		ND		NR			
Benzo[a]anthracene	ND		ND		NR			
Benzo[a]pyrene (BaP)	ND		ND		NR			
Benzo[b]fluoranthene	ND		ND		NR			
Benzo[e]pyrene	ND		ND		NR			
Benzo[ghi]perylene	ND		ND		NR			
Benzo[j]fluoranthene	ND		ND		NR			
Benzo[k]fluoranthene	ND		ND		NR			
Chrysene	ND		ND		NR			
Dibenz[a,h]anthracene	ND		ND		NR			
Fluoranthene	ND		ND		NR			
Fluorene	ND		ND		NR			
Indeno[1,2,3-cd]pyrene	ND		ND		NR			
Naphthalene	ND		ND		NR			
Phenanthrene	ND		ND		NR			
Pyrene	ND		ND		NR			
1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)								
2-naphthylamine	ND	NR	NR	NR	NR	0.1	-	-
2-naphthylammoniumacetate	ND				NR			
2,4-xylidine	ND				NR			
2,4,5-trimethylaniline	ND				NR			
2,4,5-trimethylaniline hydrochloride	ND				NR			
2,6-xylidine	ND				NR			
3,3'-dichlorobenzidine	ND				NR			
3,3-dimethoxylbenzidine	ND				NR			
3,3-dimethylbenzidine	ND				NR			
4-aminoazobenzene	ND				NR			
4-aminodiphenyl	ND				NR			
4-chloro-o-toluidine	ND				NR			
4-chloro-o-toluidinium chloride	ND				NR			
4-chloroaniline	ND				NR			
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	ND				NR			
4-methoxy-m-phenylenediamine	ND				NR			
4-methyl-m-phenylenediamine	ND				NR			
4,4-methylene-bis-(2-chloro-aniline)	ND				NR			
4,4-methylenedi-o-toluidine	ND				NR			
4,4-methylenedianiline	ND				NR			
4,4-oxydianiline	ND				NR			
4,4-thiodianiline	ND				NR			
5-nitro-o-toluidine	ND				NR			
6-methoxy-m-toluidine	ND				NR			
Benzidine	ND				NR			
o-aminoazotoluene	ND				NR			
o-anisidine	ND				NR			
o-toluidine	ND				NR			

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001	I002	I003#	I004#	I005	Wastewater	Sludge#	Leachate#
	(µg/L)	(µg/L)	(mg/kg)	(mg/L)	(µg/L)	(µg/L)	(mg/kg)	-
1S) UV Absorbers								
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	ND	NR	NR	NR	NR	100	-	-
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)	ND				NR			
2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)	ND				NR			
2,4-Di-tert-butyl-6-(5- chlorobenzotriazole-2-yl) phenol (UV-327)	ND				NR			
1T) Volatile Organic Compounds (VOC)								
Benzene	ND	NR	NR	NR	NR	1	-	-
m-cresol	ND				NR			
o-cresol	ND				NR			
p-cresol	ND				NR			
Xylene	ND				NR			
Toluene[a]	ND				NR			

a = Report only for mock leather

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Test Report: (6823)079-0228

Report Date: April 08, 2023

Test Result - ZDHC Heavy Metals Parameters

Test Parameters	Unit			Results of Test Items					Requirements [Textile]				
									Wastewater				Sludge
	Wastewater	Sludge	Leachate	I001	I002	I003#	I004#	I005	Foundational	Progressive	Aspirational	Discharge Limit	Sludge Threhold Values
ZDHC Heavy Metals													
Antimony	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.1	0.05	0.01	-	12
Chromium (VI)	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.05	0.005	0.001	-	50
Barium	mg/L	mg/kg	mg/L		ND	ND	NR	NR				-	700
Selenium	mg/L	mg/kg	mg/L		ND	ND	NR	NR	Sample & Report			-	10
Tin	mg/L	-	-		ND	NR	NR	NR				-	-
Arsenic	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.05	0.01	0.005	-	10
Total Chromium	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.2	0.1	0.05	-	100
Cobalt	mg/L	mg/kg	mg/L	NR	ND	ND	NR	NR	0.05	0.02	0.01	-	1600
Cadmium	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.1	0.05	0.01	-	3
Copper	mg/L	mg/kg	mg/L		ND	ND	NR	NR	1	0.5	0.25	-	200
Lead	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.1	0.05	0.01	-	10
Nickel	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.2	0.1	0.05	-	70
Silver	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.1	0.05	0.005	-	100
Zinc	mg/L	mg/kg	mg/L		ND	ND	NR	NR	5	1	0.5	-	1000
Mercury	mg/L	mg/kg	mg/L		ND	ND	NR	NR	0.01	0.005	0.001	-	1

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

Report Date: April 08, 2023

Test Result - ZDHC Conventional and Anions Parameters

Test Parameters	Unit			Results of Test Items					Requirements [Textile]				
									Wastewater				Sludge
	Wastewater	Sludge	Leachate	I001	I002	I003#	I004#	I005	Foundational	Progressive	Aspirational	Discharge Limit	Sludge Threhold Values
ZDHC Conventional													
pH	pH				7.5	7.9			6 - 9			-	
Temparture difference	Δ °C				3.25				15	10	5	-	
E.coli	cfu/100-ml				<1				126			-	
Colour (436 nm)	m^{-1}				6.5				7	5	2	-	
Colour (525 nm)	m^{-1}				4.7				5	3	1	-	
Colour (620 nm)	m^{-1}				2.6				3	2	1	-	
Persistent Foam	-				Absent				No indication of Persistent Foam			-	
Wastewater Flowrate	m^3/day				1492.94				-			-	
Ammonium-Nitrogen	mg/L				ND				10	1	0.5	-	
AOX	mg/L				0.83				3	0.5	0.1	-	
BOD_5	mg/L	-			11	NR			30	15	8	-	
COD	mg/L				43				150	80	40	-	
DO	mg/L		-	NR	7.5		NR	NR	Sample & Report			-	-
Oil & Grease	mg/L				2.1				10	2	0.5	-	
Total Phenols / Phenol Index	mg/L				0.003				0.5	0.01	0.001	-	
Total Chlorine	mg/L				0.16				Sample & Report			-	
TDS	mg/L				1504							-	
Total Nitrogen	mg/L				14.15				20	10	5	-	
Total Phosphorus	mg/L				0.67				3	0.5	0.1	-	
TSS	mg/L				48				50	15	5	-	
% Solids	-	%			NR	73.78			-			-	
Paint Filter Test	-	-				Pass			-			-	
Fecal Coliform	-	MPN/100 ml				14			-			-	
ZDHC Anions													
Chloride	mg/L	-	-		17.49	NR			Sample & Report			-	
Cyanide, total	mg/L	mg/kg	-		ND	ND			0.2	0.1	0.05	-	
Sulfate	mg/L			NR	10.69		NR	NR	Sample & Report			-	-
Sulfide	mg/L	-	-		0.08	NR			0.5	0.05	0.01	-	
Sulfite	mg/L				1				2	0.5	0.2	-	

#Limit refers to the chosen ZDHC sludge disposal pathway in Table 4 in accordance with the ZDHC Wastewater Guidelines.

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Appendix A - Discharge limit according to regulation: The Environment Conservation Rules, 1997, (Inland Surface Water, 4)

Sl No.	Test Parameters	Type	unit	Limitation Value of Legal Requirements
1	Temperature	Conventional	°C	40
2	TSS	Conventional	mg/L	150
3	COD	Conventional	mg/L	200
4	Total-N	Conventional	mg/L	NA
5	pH	Conventional	Range	6-9
6	Colour [m-1] (436nm; 525; 620nm)	Conventional	m^-1	NA
7	BOD5	Conventional	mg/L	50
8	Ammonium-N	Conventional	mg/L	50
9	Total Phosphorus	Conventional	mg/L	8
10	AOX	Conventional	mg/L	NA
11	Oil and Grease	Conventional	mg/L	10
12	Phenol / Phenol Index	Conventional	mg/L	1
13	Coliform	Conventional	bacteria/100 ml	NA
14	Chloride	Conventional	mg/L	600
15	Persistent Foam	Conventional	--	NA
16	Cyanide	Conventional	mg/L	0.1
17	DO(Dissolved Oxygen)	Conventional	mg/L	4.5-8
18	Sulfide	Conventional	mg/L	1
19	Total Dissolved Solids	Conventional	mg/L	2100
20	Electrical Conductivity	Conventional	µmhos/cm	1200
21	Fluoride	Conventional	mg/L	2
22	Sulfite	Conventional	mg/L	NA
23	Antimony	Metals	mg/L	NA
24	Chromium, total	Metals	mg/L	0.5
25	Cobalt	Metals	mg/L	NA
26	Copper	Metals	mg/L	0.5
27	Boron	Metals	mg/L	2
28	Nickel	Metals	mg/L	1
29	Silver	Metals	mg/L	NA
30	Zinc	Metals	mg/L	5
31	Arsenic	Metals	mg/L	0.2
32	Cadmium	Metals	mg/L	0.5
33	Chromium (VI)	Metals	mg/L	0.1
34	Lead	Metals	mg/L	0.1
35	Mercury	Metals	mg/L	0.01
36	Iron	Metals	mg/L	2
37	Selenium	Metals	mg/L	0.05
38	Manganese	Metals	mg/L	5

NA=Not Applicable

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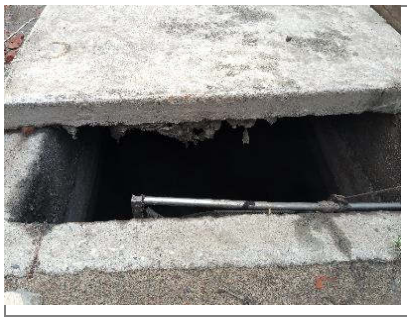
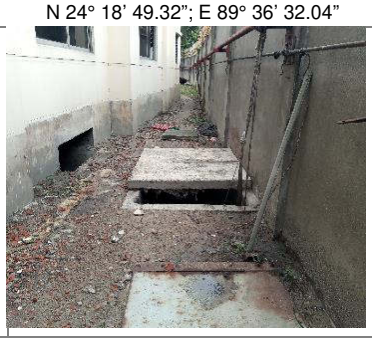
Appendix B - Sample Photos

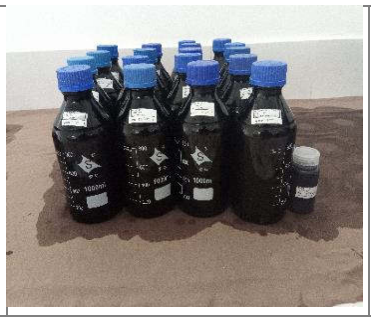
I001) Sampling point
N 24° 18' 49.32"; E 89° 36' 32.04"



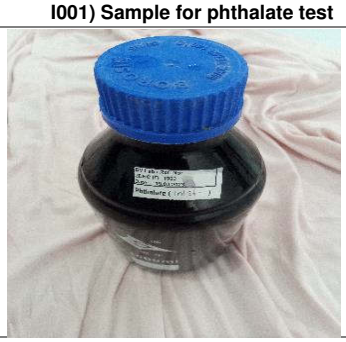
I001) Sampling location surrounding
N 24° 18' 49.32"; E 89° 36' 32.04"



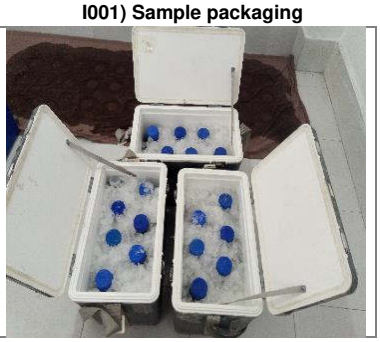
I001) Labelled sample bottles



I001) Sample for phthalate test

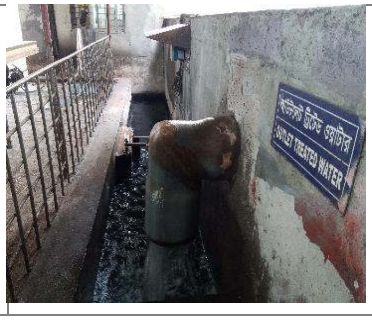


I001) Sample packaging

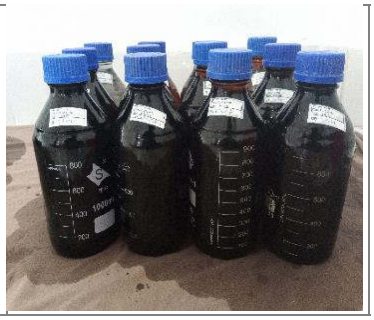


I002) Sampling point
N 24° 18' 49.32"; E 89° 36' 32.04"

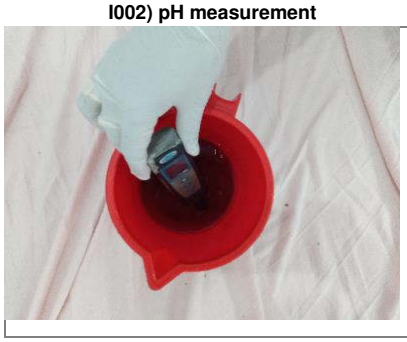
I002) Sampling location surrounding
N 24° 18' 49.32"; E 89° 36' 32.04"



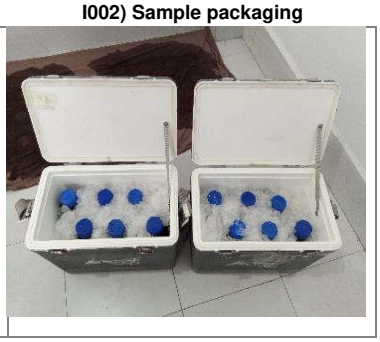
I002) Labelled sample bottles



I002) pH measurement



I002) Sample packaging



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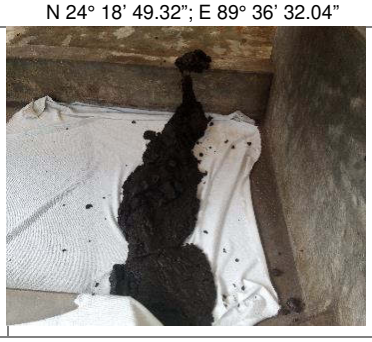
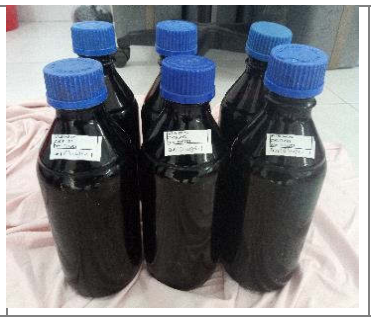
Appendix B - Sample Photos (continued)

I003) Sampling point
N 24° 18' 49.32"; E 89° 36' 32.04"

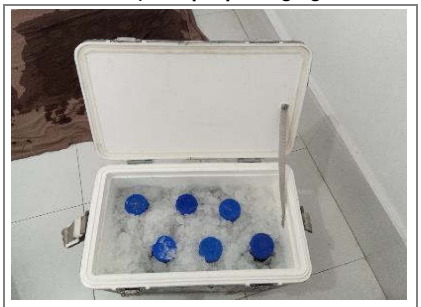
I003) Sampling location surrounding
N 24° 18' 49.32"; E 89° 36' 32.04"



I003) Labelled sample bottles



I003) Sample packaging



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Appendix C - On-site Field Data Record Sheet

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)

CPSD-AN-00613-DATA 04
Issue Date:
Version No.: 18
Business Line: Analytical

General Data

Laboratory Sample Number:	(6823) 079-0224
Client Name:	
Field Contact Person:	Abu Nayen Shatez Phone No: 01921-573841
Project (Facility Name and Address):	Iris Fabrics Ltd. Zirani, Kashimpur, Gazipur
Sample Identification:	Zero discharge with sampling plan
Sample Type:	Composite Sample / Grab sample (Please delete as appropriate)
Discharge mode:	Direct discharge to environment (Specify destination: River, Sea, Stream…) OR indirect discharge to sewage treatment plant
Date of collection:	19.03.23
Factory Type:	Dyeing / Printing / Washing / Finishing / Others (please specify):

*Note: It would be selected more than one

Sampling Collection Information

Sampling Location / Description:	ETP- Inlet
Sampling Device Description/ Owner:	
Sampling mode:	Autosampler/ Manual

Sampler Information

Sampler Name/ Email:	masudrana27496@gmail.com
Sampler ZDHC Accredited no.:	c74D106817481
ZDHC Composite Sample Code:	

Field Data for Wastewater

Arrival Time:	10.40		Departure Time:	17.20				
Field Parameters	pH : 10.1		Temp : 39.3 °C	Color : Blue		Flow rate :	(volume/min)	
Control No. of field equipment								
Factory with effluent treatment plant:	✓ Yes			No				
Sample matrix:		Incoming water (If required)						
	✓	Wastewater before treatment						
		Wastewater after treatment – water at discharge point						
Sampler container number	18							

ZDHC Wastewater Flow Device Dimensions

Measurement (cm)	Meter	Pipe (O)	Flume (U)	Weir (V)
Diamter	NA			
Depth	NA	NA	NA	

ZDHC Wastewater Sampling Field Testing QA/ QC

Parameter	Laboratory control sample (LCS) Known	LCS Measured	Accuracy %
pH			
Total Chlorine			

ZDHC Wastewater Sample Collection Field Test Measurements

Sampling Time (Hours)		0	1	2	3	4	5	6	Average (Report with lab data
Recording time	ID								--
	Time	11.00	12.00	13.00	14.00	15.00	16.00	17.00	--
Temp (°C) :	Wastewater Discharge	36.1	34.8	39.5	37.5	40.5	39.3	38.6	
	Receiving Water	—	—	—	—	—	—	—	
pH :		10.3	10.2	8.1	8.0	10.4	10.1	10.2	
Dissolved Oxygen (mg/L):		/	/	/	/	/	/	/	
Total Chlorine (mg/L):									
Persistent Foam (Yes/ No):									
Wastewater Flow meter(L/min): m3/h		56.8	62.5	58.6	52.4	61.4	52.7	57.8	
Alternate measured Flow	Depth (cm)	/	/	/	/	/	/	/	
	Velocity (cm/sec)								
Color (visual estimation):		Reddish	Reddish	Blue	Blue	Blue	Blue	Reddish	
Volume collected, mL		145x18	145x18	145x18	145x18	145x18	145x18	145x18	
Total volume collected mL		18270	Remark: Total volume collected must be greater than total of sample size required						

Test Report: (6823)079-0228

Report Date: April 08, 2023

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04 Issue Date: Version No.: 18 Business Line: Analytical

Analysis Required and Preservation Method

Tests (ZDHC MRSL Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method (Store sample at 2-8°C)
Combined test or Individual test (Remark 4)	1. Phthalate	✓	1000 mL total or 1000 mL each	Amber Glass,washed with nitric acid,	Without adding acid
	2. Chlorobenzenes, Chlorotoluene & PAH	✓			
	3. SCCPs	✓			
	4. APS	✓			
5. APEOs		✓	100 mL		
6. Chlorophenols & Cresols		✓	100 mL		
7. Flame retardant		✓	500 mL		
8. Dyes		✓	10 mL		
9. Glycol		✓	50 mL		
10. *Pesticides		✗	1000 mL		
11. *Nitrosamine		✗	10 mL		
12. Banned Azodyes		✓	2000 mL		
13. *Free primary aromatic amines		✗	500 mL		
14. Organotin Compounds		✓	500 mL		
15. UV absorbers		✓	100		
16. BPA		✓	2		
17 Preservatives		✓	52		
18. VOC & Halogenated Solvents (Remark 6)		✓	10 mL		Fill to full container without air gap; acidify to pH 2 with HCl
19. PFCs (Remark 6)		✓	2 mL	PE, washed with pesticide grade Acetone	Without adding acid

Tests (Conventional Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method (Store sample at 2-8°C)
Combined test or Individual test (Remark 4)	20. Total suspended solids (TSS)		2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid,	Without adding acid
	21. Total dissolved solids (TDS)				
22. 5-day Biochemical Oxygen Demand (BOD5)			1000 mL		
23. Colour			100 mL		
24. Heavy Metals except Cr(VI) & Total-P (Remark 6)			9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO_3
25. Cyanide			500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 ml of 10% $Na_2S_2O_3$
26. Cr(VI)			95 mL	Amber Glass; washed with nitric acid	Filter by 0.45µm filter in field, fill to full container without air gap; adjust pH to 9.0-9.5 by adding ammonium buffer
27. Chemical oxygen demand (COD)			150 mL		Acidify to pH 2 with H_2SO_4
28. Phenols			500 mL		
29. Oil and Grease & Total Hydrocarbon			1000 mL		
30. *Formaldehyde			25 mL		Fill to full container without air gap; acidify to pH 2 with H_2SO_4
31. Sulfide (Remark 5)			50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 6M NaOH
32.E.coli (Remark 6)			125 mL	PE, clean, sterile, non-reactive	Add 0.1 ml of 10% Na2S2O3 ,keep in dark
33. Sulfite			100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA
34. Total-N			100 mL	Amber Glass;washed with nitric acid;	Acidify to pH 2 with H_2SO_4
35. Ammonium-N			500 mL		
36. Adsorbable organically bound halogens (AOX)			100 mL		Acidify to pH 2 with HNO_3
37. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphne; Alage;			1000 mL		
38. Sulphate			100 mL		Without adding acid

Test Report: (6823)079-0228

Report Date: April 08, 2023

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 18
	Business Line: Analytical

39. Chloride	1	100 mL		
40. Others:				
Observation/ Remark:				

*Remarks:

1. Individual sampling can be performed upon request
2. The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
3. Scope of ZDHC guideline: Parameter 1-9, 12, 14-29, 31-36, 38, 39
   Scope of synthetic leather industry: Parameter 1-9, 12, 14-24, 26-29, 31, 32, 34, 35, 36, 39
   Scope of MMCF: Parameter 5, 18, 20, 22-24, 26-29, 31, 34-37
   Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guidline, they are tested upon request.
4. Refer to CPSD-AN-G00019-STIP01, loactions with those CPSD test capability inside TCD matrix can perform the combined test.
5. Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
6. Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by: Full name: Md. Masud Rana Date: 19.03.23

Comment from factory

Acknowledgement by factory

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) is/are collected in desinated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-6°C

Signatory of Factory Representative: Full Name: Date:

Test Report: (6823)079-0228

Report Date: April 08, 2023

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)

CPSD-AN-00613-DATA 04 | Issue Date: | Version No.: 18 | Business Line: Analytical

General Data

Laboratory Sample Number: (6823)079-0228

Client Name:

Field Contact Person: Abu Nayen Shatez Phone No: 01921-573841

Project (Facility Name and Address): Iris Fabrics Ltd, Zirani, Kashimpur, Gazipur.

Sample Identification: Zero discharge with sampling plan

Sample Type: Composite Sample / Grab sample (Please delete as appropriate)

Discharge mode: Direct discharge to environment (Specify destination: River, Sea, Stream...) OR Indirect discharge to sewage treatment plant (govt. ~~drain~~ canal)

Date of collection: 19.03.23

Factory Type: Dyeing / Printing / Washing / Finishing / Others (please specify):

*Note: it would be selected more than one

Sampling Collection Information

Sampling Location / Description: ETP. Outlet

Sampling Device Description/ Owner:

Sampling mode: Autosampler/ Manual

Sampler Information

Sampler Name/ Email: Mashurana27406@gmail.com

Sampler ZDHC Accredited no.: C74D10C817431

ZDHC Composite Sample Code:

Field Data for Wastewater

Arrival Time:	10.30	Departure Time:	17.20	
Field Parameters	pH: 7.6	Temp: 30.4 °C	Color: Lite Blue	Flow rate: (volume/min)
Control No. of field equipment				
Factory with effluent treatment plant:	✓ Yes		No	
Sample matrix:		Incoming water (If required)		
		Wastewater before treatment		
	✓	Wastewater after treatment – water at discharge point		
Sampler container number	12			

ZDHC Wastewater Flow Device Dimensions

Measurement (cm)	Meter	Pipe (O)	Flume (U)	Wier (V)
Diamter	NA			
Depth	NA	NA	NA	

ZDHC Wastewater Sampling Field Testing QA/ QC

Parameter	Laboratory control sample (LCS) Known	LCS Measured	Accuracy %
pH			
Total Chlorine			

ZDHC Wastewater Sample Collection Field Test Measurements

Sampling Time (Hours)		0	1	2	3	4	5	6	Average (Report with lab data
Recording time	ID								-
	Time	11.00	12.00	13.00	14.00	15.00	16.00	17.00	-
Temp (°C):	Wastewater Discharge	29.9	30.4	30.2	30.6	31.2	30.7	30.9	
	Receiving Water	27.3	—	—	—	—	—	—	
pH:		7.6	7.6	7.7	7.5	7.4	7.5	7.5	
Dissolved Oxygen (mg/L):		7.68	7.56	7.51	7.48	7.42	7.39	7.41	
Total Chlorine (mg/L):		0.1	0.2	0.2	0.1	0.2	0.2	0.1	
Persistant Foam (Yes/ No):		NO	NO	NO	NO	NO	NO	NO	
Wastewater Flow meter(L/min): m3/h		33.50	34.8	36.8	36.4	38.2	35.1	36.4	
Alternate measured Flow	Depth (cm)	/	/	/	/	/	/	/	
	Velocity (cm/sec)								
Color (visual estimation):		L. Blue	L. Blue	L. Blue	L. Blue	L. Blue	L. Blue	L. Blue	
Volume collected, mL		145X12	145X12	145X12	145X12	145X12	145X12	145X12	
Total volume collected		12180	Remark: Total volume collected must be greater than total of sample size required						

Test Report: (6823)079-0228

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04 Issue Date: Version No.: 18 Business Line: Analytical

Analysis Required and Preservation Method

Tests (ZDHC MRSL Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method (Store sample at 2-8°C)
Combined test or Individual test (Remark 4)	1. Phthalate		1000 mL total or 1000 mL each	Amber Glass,washed with nitric acid,	Without adding acid
	2. Chlorobenzenes, Chlorotoluene & PAH				
	3. SCCPs				
	4. APS				
5. APEOs			100 mL		
6. Chlorophenols & Cresols			100 mL		
7. Flame retardant			500 mL		
8. Dyes			10 mL		
9. Glycol			50 mL		
10. *Pesticides			1000 mL		
11. *Nitrosamine			10 mL		
12. Banned Azodyes			2000 mL		
13. *Free primary aromatic amines			600 mL		
14. Organotin Compounds			500 mL		
15. UV absorbers			100		
16. BPA			2		
17 Preservatives			52		
18. VOC & Halogenated Solvents (Remark 6)			10 mL		Fill to full container without air gap; acidify to pH 2 with HCl
19. PFCs (Remark 6)			2 mL	PE, washed with pesticide grade Acetone	Without adding acid

Tests (Conventional Parameters)		Test required (√)	Total of sample size	Type of container	Preservation method (Store sample at 2-8°C)
Combined test or Individual test (Remark 4)	20. Total suspened solids (TSS)	✓	2000 mL total or 2000 mL each	Amber Glass, washed with nitric acid,	Without adding acid
	21. Total dissolved solids (TDS)	✓			
22. 5-day Biochemical Oxygen Demand (BOD5)		✓	1000 mL		
23. Colour		✓	100 mL		
24. Heavy Metals except Cr(VI) & Total-P (Remark 6)		✓	9 mL	PE, washed with nitric acid	Acidify to pH 2 with HNO_3
25. Cyanide		✓	500 mL	Amber Glass, washed with pesticide grade acetone	Adjust pH 12 with 50% NaOH, add 0.05 ml of 10% $Na_2S_2O_3$
26. Cr(VI)		✓	95 mL	Amber Glass; washed with nitric acid	Filter by 0.45µm filter in field, fill to full container without air gap; adjust pH to 9.0-9.5 by adding ammonium buffer
27. Chemical oxygen demand (COD)		✓	150 mL		Acidify to pH 2 with H_2SO_4
28. Phenols		✓	500 mL		
29. Oil and Grease & Total Hydrocarbon		✓	1000 mL		
30. *Formaldehyde		✗	25 mL		Fill to full container without air gap; acidify to pH 2 with H_2SO_4
31. Sulfide (Remark 5)		✓	50 mL	PE, washed with pesticide grade Acetone;	Fill to full container without air gap; add 2 drops of 2M zinc acetate, adjust pH to 9 with 6M NaOH
32.E.coli (Remark 6)		✓	125 mL	PE, clean, sterile, non-reactive	Add 0.1 ml of 10% Na2S2O3 ,keep in dark
33. Sulfite		✓	100 mL	Amber Glass, washed with pesticide grade acetone	Add 1mL of 2.5% EDTA
34. Total-N		✓	100 mL	Amber Glass;washed with nitric acid;	Acidify to pH 2 with H_2SO_4
35. Ammonium-N		✓	500 mL		
36. Adsorbable organically bound halogens (AOX)		✓	100 mL		Acidify to pH 2 with HNO_3
37. Acute aquatic toxicity: Luminus Bacteria; Fish Egg; Daphne; Alage;		✗	1000 mL		Without adding acid
38. Sulphate		✓	100 mL		

Test Report: (6823)079-0228

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04 Issue Date: Version No.: 18 Business Line: Analytical

39. Chloride	✓	100 mL		
40. Others:	↖			
Observation/ Remark:				

*Remarks:

1. Individual sampling can be performed upon request
2. The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
3. Scope of ZDHC guideline: Parameter 1-9, 12, 14-29, 31-36, 38, 39
   Scope of synthetic leather industry: Parameter 1-9, 12, 14-24, 26-29, 31, 32, 34, 35, 38, 39
   Scope of MMCF: Parameter 5, 19, 20, 22-24, 26-29, 31, 34-37
   Free primary aromatic amine, pesticides, nitrosamine and formaldehyde are not in the scope of ZDHC Guidline, they are tested upon request.
4. Refer to CPSD-AN-G00019-STIP01, loactions with those CPSD test capability inside TCD matrix can perform the combined test.
5. Refer to CPSD-AN-000570-MTHD for additional pretreatment of sulfide if only dissolved sulfide is required to be tested.
6. Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

Recorded by: Full name: Md. Masud Rana Date: 19.03.23

Comment from factory

Acknowledgement by factory

I hereby confirmed that Bureau Veritas has completed the stated sampling activity at captioned date, time and location. All sample(s) is/are collected in desinated container(s) and without any observation in leakage. Sample(s) collected by Bureau Veritas is/are stored in portable freezer / fridge that is maintained in 1-6°C

Signatory of Factory Representative: Full Name: Date: 19-03-23

Test Report: (6823)079-0228

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)

CPSD-AN-00813-DATA 04
Issue Date:
Version No.: 18
Business Line: Analytical

Field Data for Sludge

Arrival Time:	10.30		Departure Time:	17.20					
Field Parameters	pH :	Temp : °C	Flow rate (volume/time) / sludge flux (weight/time):						
Control No. of field equipment			color: Black, Mud						
Sampling Time (Hours)		0	1	2	3	4	5	6	Average (Report with lab data
Recording time	ID								
	Time								
pH :									
Temp (°C) :									
Flow rate (volume/time) / sludge flux (weight/time)									
Volume collected, mL									
Total volume collected		Remark: Total volume collected must be greater than total of sample size required							

Analysis Required and Preservation Method

Factory with effluent treatment plant		✓	Yes				No		
Sample matrix			Sludge in clarifier (sedimentation tank)						
Sampler container number		6							
Recording time		14.10							
Tests (MRSL Parameter)		Test required (√)	Total of sample size	Type of container			Preservation method (Store sample at 2-8°C)		
Combined test or Individual test (Remark 3)	1. Phthalate	X	10g total or 10g each	Amber Glass, washed with nitric acid			Add 0.2 mL of 10% $Na_2S_2O_3$ (0.006% V/W)		
	2. Chlorobenzenes, Chlorotoluene & PAHs	✓							
	3. SCCPs	X							
	4. APS	✓							
5. APEOs		✓	20 g						
6. Flame retardant			10 g						
7. Dyes			10 g						
8. Glycols			100 g						
9. *Pesticides			20g						
10. Banned Azodyes			20 g						
11. *Free primary aromatic amines			10 g						
12. Chlorophenols & Cresols			20 g				Acidify to ~pH 2 with H_2SO_4. Add 0.02 mL of 10% $Na_2S_2O_3$ (0.008% W/V)		
13. Organotin Compounds			10 g				Fill to full container without any air gap and acid add		
14. VOC & Halogenated Solvents (Remark 5)			10 g				Fill to full bottle without any air gap. Acidify to ~pH 2 with HCl		
15. PFCs (Remark 5)			10 g	PE, wash with pesticide garde acetone			Add 0.02 mL of 10% $Na_2S_2O_3$ (0.008% W/V)		

Tests (Conventional Parameters)	Test required (√)	Total of sample size	Type of container	Preservation method (Store sample at 2-8°C)
16. Heavy Metals except Cr(VI) (Remark 5)	✓	0.2 g	PE, wash with nitric acid	Acidify to ~pH 2 with HNO_3
17. Cr(VI)	✓	2.5 g	Amber Glass, wash with nitric acid	Fill to full container without any air gap and acid add
18. Adsorbable organically bound halogens (AOX)		1 g		
19. Extractable organichalides (EOX)		20 g		
20. Total organic carbon (TOC)		20 g		
21. Cyanide	✓	50 g	Amber Glass, wash with pesticide grade acetone	Adjust pH to 12-13 with 50% NaOH
22. Feacal Coliform	✓	20 g	PE, clean, sterile, non-reactive	Add 0.1 ml of 10% Na2S2O3 ,keep in dark

Bureau Veritas Consumer Products Services (BD) Ltd.
Plot # 130, DEPZ Extension Area Ganakbari, Savar, Dhaka, Bangladesh
Tel: 88-02-7701464-6, Fax: 88-02-7701463. website: cps.bureauveritas.com

BUREAU VERITAS

Report Date: April 08, 2023

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

FIELD DATA RECORD ON ZERO DISCHARGE SAMPLE (COMPOSITE / INDIVIDUAL SAMPLING)	CPSD-AN-00613-DATA 04
	Issue Date:
	Version No.: 18
	Business Line: Analytical

23. % Solids	✓	20 g	Amber Glass, wash with nitric acid	Acidify to ~pH 2 with HNO3
24. Paint Filter Test	✓	20 g		
25. Others	X			
Observation/ Remark:				

*Remarks:
1. Individual sampling can be performed upon request
2. The minimum sampling time for 2019 ZDHC guideline is 6 hours with no more than one hour between discrete samples. Sampling time could be adjusted upon request.
3. Scope of ZDHC guideline: Parameter 1, 2, 4, 5, 16-17, 21-24
   Scope of synthetic leather industry: Parameter 1-8, 10, 12-17
   Scope of MMCF: Parameter 16, 18-20
   Free primary aromatic amine and pesticides are not in the scope of ZDHC Guidline, they are tested upon request.
4. Refer to CPSD-AN-GC0019-STIP01, loactions with those CPSD test capability inside TCD matrix can perform the combined test.
5. Refer to CPSD-AN-00613-MTHD for preparation of field blank for specific parameters.

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.

Facility Name:	IRIS Fabrics Ltd.	Sampler's Name:	Md. Masud Rana
Facility Representative Name:	Md. Abu Nasir Shakil	Sampler's ZDHC Accreditation:	CX401068172431
Facility Representative Signature and stamp:		Sampler's Signature:	

IRIS FABRICS LTD. Date..... Zirani, Joydebpur, Gazipur

Test Report: (6823)079-0228

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Appendix D - Test methods, reporting limits and CAS numbers

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1A) AP and APEOs: including all isomers						
Nonylphenol ethoxylates (NPEO)	µg/L	mg/kg	9016-45-9, 26027-38-3, 37205-87-1, 68412-54-4, 127087-87-0	5	0.4	NP/OP: ISO 18857-2 (modified dichloromethane extraction) or ASTM D7065 (GC-MS or LC-MS(-MS), OPEO/NPEO (n>2): ASTM D7742 ISO 18857-2
Nonylphenol (NP), mixed isomers			104-40-5, 11066-49-2, 25154-52-3, 84852-15-3			
Octylphenol ethoxylates (OPEO)			9002-93-1, 9036-19-5, 68987-90-6			
Octylphenol (OP), mixed isomers			140-66-9, 1806-26-4, 27193-28-8			
1B) Anti-Microbials & Biocides						
o-Phenylphenol (+salts)	µg/L	-	90-43-7	100	-	USEPA 8270E Solvent extraction, derivatisation with KOH, acetic anhydride followed by GC-MS BS EN 12673-1999
Triclosan			3380-34-5			
Permethrin			Multiple	500		USEPA 8270E Solvent extraction followed by GC-MS or ISO 14154:2005 and determination by LCMS/LCMSMS
1C) Chlorinated Parafins						
Medium-chain chlorinated paraffins (MCCPs) (C14-C17)	µg/L	-	85535-85-9	500	-	EPA 3510 and analyzed by ISO18219-2:2021 Method for MCCP with GC-MS(NCI) or LC-MS/MS
Short-chain chlorinated paraffins (SCCPs) (C10-C13)			85535-84-8	25		EPA 3510 and analyzed by ISO18219-1:2021, ISO 12010:2019 Methods for SCCP with GC-MS(NCI) or LC-MS/MS
1D) Chlorobenzenes and Chlorotoluenes						
1,2-dichlorobenzene	µg/L	-	95-50-1	0.2	-	USEPA 8260D, 8270E, Purge and Trap, Head Space, Dichloromethane extraction followed by GC-MS
Other isomers of mono-, di, tri-, tetra-, penta-, and hexa- chlorobenzene			Multiple			
Other isomers of mono-, di-, tri-, tetra-, and penta- chlorotoluene		mg/kg			0.2	
1E) Chlorophenols						
2-chlorophenol	µg/L	-	95-57-8	0.5	-	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
3-chlorophenol			108-43-0			
4-chlorophenol			106-48-9			
2,3-dichlorophenol			576-24-9			
2,4-dichlorophenol			120-83-2			
2,5-dichlorophenol			583-78-8			
2,6-dichlorophenol			87-65-0			
3,4-dichlorophenol			95-77-2			
3,5-dichlorophenol			591-35-5			
2,3,4-trichlorophenol			15950-66-0			
2,3,5-trichlorophenol			933-78-8			
2,3,6-trichlorophenol			933-75-5			
2,4,5-trichlorophenol			95-95-4			
2,4,6-trichlorophenol			88-06-2			
3,4,5-trichlorophenol			609-19-8			
2,3,5,6-tetrachlorophenol			935-95-5			
2,3,4,6-tetrachlorophenol			58-90-2			
2,3,4,5-tetrachlorophenol			4901-51-3			
Pentachlorophenol (PCP)			87-86-5			
1F) Dimethyl Formamide (DMFa)						
Dimethyl formamide; N,N-dimethylformamide (DMFa)[a]	µg/L	-	68-12-2	1000	-	EPA 8015, EPA 8270E

a = Report only for mock leather

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Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1G) Dyes - Carcinogenic or Equivalent Concern						
Basic Violet 3 with >0.1% of Michler´s Ketone	µg/L	-	548-62-9	500	-	Liquid extraction, LC-MS
C.I. Acid Red 26			3761-53-3			
C.I. Acid Violet 49			1694-09-3			
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)			2580-56-5			
C.I. Basic Green 4 (Malachite Green Chloride)			569-64-2			
C.I. Basic Green 4 (Malachite Green Oxalate)			2437-29-8			
C.I. Basic Green 4 (Malachite Green)			10309-95-2			
C.I. Basic Red 9			569-61-9			
C.I. Basic Violet 14			632-99-5			
C.I. Direct Black 38			1937-37-7			
C.I. Direct Blue 6			2602-46-2			
C.I. Direct Red 28			573-58-0			
C.I. Disperse Blue 1			2475-45-8			
C.I. Disperse Blue 3			2475-46-9			
Disperse Orange 11			82-28-0			
1H) Dyes - Disperse (Allergenic)						
Disperse Blue 102	µg/L	-	12222-97-8	50	-	Liquid extraction, LC-MS
Disperse Blue 106			12223-01-7			
Disperse Blue 124			61951-51-7			
Disperse Blue 26			3860-63-7			
Disperse Blue 35			12222-75-2			
			56524-77-7			
Disperse Blue 7			3179-90-6			
Disperse Brown 1			23355-64-8			
Disperse Orange 1			2581-69-3			
Disperse Orange 3			730-40-5			
Disperse Orange 37/59/76			13301-61-6			
Disperse Red 1			2872-52-8			
Disperse Red 11			2872-48-2			
Disperse Red 17			3179-89-3			
Disperse Yellow 1			119-15-3			
Disperse Yellow 3			2832-40-8			
Disperse Yellow 39			12236-29-2			
Disperse Yellow 49			54824-37-2			
Disperse Yellow 9			6373-73-5			
1I) Dyes - Navy Blue Colourant						
Component 1: C39H23Cl-CrN7O12S 2Na	µg/L	-	118685-33-9	500	-	Liquid extraction, LC-MS
Component 2: C46H-30CrN10O20S2 3Na			Not Allocated			

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Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1J) Flame Retardants						
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	µg/L	-	3296-90-0	25	-	USEPA 8270E, ISO 22032, USEPA 527 and USEPA 8321B Dichloromethane extraction GC-MS or LC-MS(-MS)
Bis(2,3-dibromopropyl) phosphate (BIS)			5412-25-9			
Decabromodiphenyl ether (DecaBDE)			1163-19-5			
Hexabromocyclodecane (HBCDD)			3194-55-6			
Octabromodiphenyl ether (OctaBDE)			32536-52-0			
Pentabromodiphenyl ether (PentaBDE)			32534-81-9			
Polybromobiphenyls (PBB)			59536-65-1			
Tetrabromobisphenol A (TBBPA)			79-94-7			
Tris-(2-chloro-1-methylethyl)phosphate (TCPP)			13674-84-5			
Tris(1-aziridinyl)phosphine oxide) (TEPA)			545-55-1			
Tris(1,3-dichloro-isopropyl)phosphate (TDCP)			13674-87-8			
Tris(2-chloroethyl)phosphate (TCEP)			115-96-8			
Tris(2,3,-dibromopropyl)-phosphate (TRIS)			126-72-7			
Decabromobiphenyl (DecaBB)			13654-09-6			
Dibromobiphenyls (DiBB)			Multiple			
Octabromobiphenyls (OctaBB)						
Dibromopropylether			21850-44-2			
Heptabromodiphenyl ether (HeptaBDE)			68928-80-3			
Hexabromodiphenyl ether (HexaBDE)			36483-60-0			
Monobromobiphenyls (MonoBB)			Multiple			
Monobromodiphenylethers (MonoBDEs)						
Nonabromobiphenyls (NonaBB)						
Nonabromodiphenyl ether (NonaBDE)			63936-56-1			
Tetrabromodiphenyl ether (TetraBDE)			40088-47-9			
Tribromodiphenylethers (TriBDEs)			Multiple			
Boric acid[b]			10043-35-3, 11113-50-1	100		Determined as total boron via ICP
Diboron trioxide[b]			1303-86-2			
Disodium octaborate[b]			12008-41-2			
Disodium tetraborate anhydrous[b]			1303-96-4, 1330-43-4			
Tetraboron disodium heptaoxide, hydrate[b]			12267-73-1			
1K) Glycols / Glycol Ethers						
2-ethoxyethanol	µg/L	-	110-80-5	50	-	USEPA 8270E Liquid extraction, LC-MS GC-MS
2-ethoxyethyl acetate			111-15-9			
2-methoxyethanol			109-86-4			
2-methoxyethylacetate			110-49-6			
2-methoxypropylacetate			70657-70-4			
Bis(2-methoxyethyl)-ether			111-96-6			
Ethylene glycol dimethyl ether			110-71-4			
Triethylene glycol dimethyl ether			112-49-2			
1L) Halogenated Solvents						
1,2-dichloroethane	µg/L	-	107-06-2	1	-	USEPA 8260D Headspace GC-MS or Purge and trap GC-MS
Methylene chloride			75-09-2			
Tetrachloroethylene			127-18-4			
Trichloroethylene			79-01-6			

b = Limit refer to elemental boron, not the salt.

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Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1M) Organotin Compounds						
Dipropyltin compounds (DPT)	µg/L	-	Multiple	0.01	-	ISO 17353 Derivatisation with NaB (C2H5)4 GC-MS
Mono-, di- and tri-butyltin derivatives						
Mono-, di- and tri-methyltin derivatives						
Mono-, di- and tri-octyltin derivatives						
Mono-, di- and tri-phenyltin derivatives						
Tetrabutyltin compounds (TeBT)						
Tripropyltin Compounds (TPT)						
Tetraoctyltin compounds (TeOT)						
Tricyclohexyltin (TCyHT)						
Tetraethyltin Compounds (TeET)						
1N) Other/Miscellaneous Chemicals						
AEEA [2-(2-aminoethylamino)ethanol]	µg/L	-	111-41-1	500	-	Liquid extraction, LC-MSMS
Bisphenol A			80-05-7	10		Liquid extraction, LC-MS
Thiourea			62-56-6	50		
Quinoline			91-22-5	50		
Borate, zinc salt[c]			12767-90-7	100		Determine as total boron and total zinc via ICP
Silica (Used in sand blasting)[d]			14464-46-1	NA		Not a ZDHC Wastewater parameter
1O) Perfluorinated and Polyfluorinated Chemicals (PFCs)						
Perfluorooctane sulfonate (PFOS) and related substances, Perfluorooctanoic acid (PFOA)	µg/L	-	Multiple	0.01	-	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
Perfluorooctanoic acid (PFOA) related substances				1		
1P) Phthalates - including all other esters of ortho-phthalic acid						
1,2-benzenedicarboxylic acid, di-C6-8 branched and liearalkyl esters , C7-rich (DIHP)	µg/L	-	71888-89-6, 84777-06-0	10	-	USEPA 8270E, ISO 18856 Dichloromethane extraction GC-MS
1,2-benzenedicarboxylic acid, di-C7-11 branched and liearalkyl esters (DHNUP)			68515-42-4, 68515-50-4			
Bis(2-methoxyethyl)phthalate (DMEP)			117-82-8			
Butyl benzyl phthalate (BBP)			85-68-7			
Di-cyclohexyl phthalate (DCHP)			84-61-7			
Di-iso-decyl phthalate (DIDP)			26761-40-0			
Di-iso-octyl phthalate (DIOP)			27554-26-3			
Di-iso-butyl phthalate (DIBP)			84-69-5			
Di-iso-nonyl phthalate (DINP)			28553-12-0			
Di-n-hexyl phthalate (DnHP)			84-75-3			
Di-n-octyl phthalate (DNOP)			117-84-0			
Di-n-pentylphthalates			131-18-0			
Di-n-propyl phthalate (DPRP)			131-16-8			
Di(ethylhexyl) phthalate (DEHP)			117-81-7			
Dibutyl phthalate (DBP)			84-74-2			
Diethyl phthalate (DEP)			84-66-2			
Diisopentylphthalates			605-50-5			
Dinonyl phthalate (DNP)			84-76-4			

c = Limit refers to elemental boron and/or zinc, not the salt.

d = Not required to test this parameter as this is related to sand blasting

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Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1Q) Polycyclic Aromatic Hydrocarbons (PAHs)						
Acenaphthene	µg/L	mg/kg	83-32-9	1	0.2	USEPA 8270E DIN 38407-39 Solvent extraction GC-MS
Acenaphthylene			208-96-8			
Anthracene			120-12-7			
Benzo[a]anthracene			56-55-3			
Benzo[a]pyrene (BaP)			50-32-8			
Benzo[b]fluoranthene			205-99-2			
Benzo[e]pyrene			192-97-2			
Benzo[ghi]perylene			191-24-2			
Benzo[j]fluoranthene			205-82-3			
Benzo[k]fluoranthene			207-08-9			
Chrysene			218-01-9			
Dibenz[a,h]anthracene			53-70-3			
Fluoranthene			206-44-0			
Fluorene			86-73-7			
Indeno[1,2,3-cd]pyrene			193-39-5			
Naphthalene			91-20-3			
Phenanthrene			85-01-8			
Pyrene			129-00-0			
1R) Restricted Aromatic Amines (Cleavable from Azo-colourants)						
2-naphthylamine	µg/L	-	91-59-8	0.1	-	Reduction step with sodium dithionite, solvent extraction EPA 8270
2-naphthylammoniumacetate			553-00-4			
2,4-xylidine			95-68-1			
2,4,5-trimethylaniline			137-17-7			
2,4,5-trimethylaniline hydrochloride			21436-97-5			
2,6-xylidine			87-62-7			
3,3'-dichlorobenzidine			91-94-1			
3,3-dimethoxylbenzidine			119-90-4			
4-aminoazobenzene			60-09-3			Reduction step with sodium dithionite, solvent extraction EPA 8270E and ISO 14362-1 GC/MS and LC/MS/MS
4-aminodiphenyl			92-67-1			
4-chloro-o-toluidine			95-69-2			
4-chloro-o-toluidinium chloride			3165-93-3			
4-chloroaniline			106-47-8			
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate			39156-41-7			
4-methoxy-m-phenylenediamine			615-05-4			
4-methyl-m-phenylenediamine			95-80-7			
4,4-methylene-bis-(2-chloro-aniline)			101-14-4			
4,4-methylenedi-o-toluidine			838-88-0			
4,4-methylenedianiline			101-77-9			
4,4-oxydianiline			101-80-4			
4,4-thiodianiline			139-65-1			
5-nitro-o-toluidine			99-55-8			
6-methoxy-m-toluidine			120-71-8			
Benzidine			92-87-5			
o-aminoazotoluene			97-56-3			
o-anisidine			90-04-0			
o-toluidine			95-53-4			

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Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater	Sludge		Wastewater	Sludge	
1S) UV Absorbers						
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350)	µg/L	-	36437-37-3	100	-	USEPA 8270 ISO 22032, USEPA 527 and USEPA 8321B. Dichloromethane extraction GC-MS or LC-MS(-MS)
2-(2H-benzotriazol-2-yl)-4,6- ditertpentylphenol (UV-328)			25973-55-1			
2-benzotriazol-2-yl-4,6-di-tert- butylphenol (UV-320)			3846-71-7			
2,4-Di-tert-butyl-6-(5- chlorobenzotriazole-2-yl) phenol (UV-327)			3864-99-1			
1T) Volatile Organic Compounds (VOC)						
Benzene	µg/L	-	71-43-2	1	-	ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D Add ISO 20595 Static headspace for
m-cresol			108-39-4			ISO 11423-1 Headspace or Purge and trap GC-MS EPA 8270 BS EN 12673-1999
o-cresol			95-48-7			
p-cresol			106-44-5			
Xylene			1330-20-7			ISO 11423-1 Headspace or Purge and trap GC-MS USEPA 8260D
Toluene[a]			108-88-3			HJ 1067 or EPA 8260D or ISO 11423-1

a = Report only for mock leather

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Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater & Leachate	Sludge		Wastewater	Sludge	
Heavy Metals						
Antimony	mg/L	mg/kg	7440-36-0	0.01	5	With reference to EPA 3015A, 6020A, 200.8, 6020B, 3051A and ISO 17294-2 and analyzed by ICP-MS With reference to EPA 1311 and HJ/T 300 for leachate
Chromium (VI)			18540-29-9	0.001	20	
Barium			7440-39-3	1	200	
Selenium			7782-49-2	1	5	
Tin			7440-31-5	1	-	
Arsenic			7440-38-2	0.005	5	
Total Chromium			7440-47-3	0.05	50	
Cobalt			7440-48-4	0.01	400	
Cadmium			7440-43-9	0.01	1	
Copper			7440-50-8	0.25	50	
Lead			7439-92-1	0.01	5	
Nickel			7440-02-0	0.05	20	
Silver			7440-22-4	0.005	50	
Zinc			7440-66-6	0.5	400	
Mercury			7439-97-6	0.001	1	
Conventional						
pH	pH	pH	-	6 - 9		EPA 150.2, APHA 4500- H+ For Water & EPA SW 9045D For Sludge
Temperature difference	°C	-	-	-	-	Measurement by thermometer
E.coli	cfu/100-ml	-	-	126	-	ISO 9308-1
Colour	m^{-1}	-	-	2;1;1	-	ISO 7887: 2011(E), B
Persistent Foam	-	-	-	-	-	Visual
Wastewater Flowrate	m^3/day	-	-	-	-	-
Ammonium-Nitrogen	mg/L	-	-	0.5	-	Reference to APHA 4500-NH3 – N
AOX	mg/L	-	-	0.1	-	Reference to ISO 9562
Biochemical Oxygen Demand 5-days concentration (BOD_5)	mg/L	-	-	8	-	Reference to APHA 5210B (5 days)
Chemical Oxygen Demand (COD)	mg/L	-	-	40	-	Reference to APHA 5220 D
Dissolved Oxygen (DO)	mg/L	-	-	-	-	Hach manual for LDO & In-house
Oil & Grease	mg/L	-	-	0.5	-	Reference to EPA 1664
Total Phenols / Phenol Index	mg/L	-	-	0.001	-	Reference to APHA 5530 C
Total Chlorine	mg/L	-	-	0.1	-	APHA 4500-Cl G
Total Dissolved Solids (TDS)	mg/L	-	-	5	-	APHA 22nd Edition-2540C
Total Nitrogen	mg/L	-	-	5	-	Reference to APHA 4500- N-C
Total Phosphorus	mg/L	-	-	0.1	-	Reference to APHA 4500-P-J
Total Suspended Solids (TSS)	mg/L	-	-	5	-	APHA 2540D, GB 11901, ISO 11923
% Solids	-	%	-	-	-	USEPA 160.3
Paint Filter Test	-	-	-	-	-	EPA 9095B
Fecal Coliform	-	MPN/100ml	-	-	-	APHA 22 nd Ed. Part 9221 B

Test Report: (6823)079-0228

Report Date: April 08, 2023

Appendix D - Test methods, reporting limits and CAS numbers (continued)

Test Parameters	Unit		CAS No.	LOQ		Test methods
	Wastewater & Leachate	Sludge		Wastewater	Sludge	
Anions						
Chloride	mg/L	-	-	-	-	APHA 4500-Cl B
Cyanide, total		mg/kg		0.05	20	APHA 22nd Edition-4500-CN. C&E (2012), EPA 9010C, 9013 & 9014
Sulfate		-		-	-	APHA- 4500 SO4-E (2012)
Sulfide		-		0.01	-	Reference to APHA 4500-S2-D
Sulfite		-		0.2	-	Reference to EPA 377.1

Remark: The report [(6823)079-0228] is sub-contracted to India (Testtex India Laboratories Pvt. Ltd.) for E. coli, AOX, T-Nitrogen Tests.

END OF REPORT