



Test Report: (7224)130-0315

Report Date: August 13, 2024

Factory Company Name: BETA KONFEKSIYON TEKSTIL IHR. ITH. SAN VE TIC. LTD. STI.

Factory Address: FATI H MAHALLES I EGE CADDES I NO:25 SARNIC GAZIEMIR / IZMIR

Sampling Method & Description:	I001) Untreated wastewater	Composite	Black Liquid
	I002) Effluent	Composite	Light Yellow, Yellow, Orange, Brown Liquid
	I003) Sludge	Grab	Brown Solid
	I004) Leachate	-	Not tested
	I005) Incoming water	-	Not tested

Discharge Type: **Indirect Discharge with Pretreatment**

On-site ETP / Pretreatment: Yes Homgenization Tank & Holding Time: No

Discharge Destination: IZMIR WATER AND SEWERAGE ADMINISTRATION

Permit Validation Date: 08.02.2026

Conventional, Anions & Heavy Metals Overall Category: Meet discharge criteria ZDHC MRSL Parameters: Not detected

Sludge Parameters: Exceed ZDHC Threshold Value

Sample Pick Up Date: July 23, 2024 Sampler Number: ZDHC-A-22-E-C001068-R2340-7ACE3

Test Period: July 24, 2024 to August 06, 2024

Parameter(s) exceeded maximum holding time: Not exceeded

Remark 1

Please refer to discharge criteria of the offsite ETP attached at the Appendix A.

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 B		
Type of Sludge:	Brown Solid		

General enquiry and invoicing:
 Begum Unalan
begum.unalan@bureauveritas.com
 90 212 494 35 35 - Ext: 371

Technical enquiry:
 Firdevs Elikara
firdevs.elikara@bureauveritas.com
 90 212 494 35 35 - Ext: 332

Report reviewed by:

Report approved by:

Begum Unalan, Operation Manager - CS & Support

Firdevs Elikara, SCM Technical Lead

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Bureau Veritas Consumer Products Services, Inc.

Yalçın Koreş Caddesi No:22 Erdi nç Binaları A Blok 2. Kule 1. Kat 34209 Güneşli, Istanbul / Turkey

Tel:+90.212.494 35 35 Fax:+90.212.494 35 60

Website:cps.bureauveritas.com



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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



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

Test Items	Untreated wastewater	Effluent	Incoming water	
Antimony	NR	NR	NR	
Chromium (VI)		Meet	NR	
Barium		NR	NR	
Selenium		NR	NR	
Tin		NR	NR	
Arsenic		Meet	NR	
Total Chromium		NR	NR	
Cobalt		NR	NR	
Cadmium		Meet	NR	
Copper		NR	NR	
Lead		Meet	NR	
Nickel		NR	NR	
Silver		NR	NR	
Zinc		NR	NR	
Mercury		Meet	NR	
pH			NR	NR
Temperature difference			NR	
E.coli			NR	
Colour			NR	
Persistent Foam			NR	
Wastewater Flowrate			NR	
Ammonium-Nitrogen			NR	
AOX			NR	
BOD ₅			NR	
COD			NR	
DO			NR	
Oil & Grease			NR	
Total Phenols / Phenol Index			NR	
Total Chlorine			NR	
TDS			NR	
Total Nitrogen			NR	
Total Phosphorus		NR		
TSS		NR		
Chloride		NR		
Cyanide, total		NR		
Sulfate		NR		
Sulfide		NR		
Sulfite		NR		



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Result Summary - ZDHC Sludge Parameters

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



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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		2.1		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			
1C) Chlorinated Parafins								
MCCPs (C14-C17)	ND	NR	NR	NR	NR	500	-	-
SCCPs (C10-C13)	ND				NR			
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			
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

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Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 [#] (mg/kg)	I004 [#] (mg/L)	I005 (µg/L)	Wastewater (µg/L)	Sludge [#] (mg/kg)	Leachate [#] -
1G) Dyes - Carcinogenic or Equivalent Concern								
Basic violet 3 with >0.1% of Michler's Ketone	ND				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	NR	NR	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	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	NR	NR	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	500	-	-
Component 2: C46H-30CrN10O20S2 3Na	ND	NR	NR	NR	NR			

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Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 [#] (mg/kg)	I004 [#] (mg/L)	I005 (µg/L)	Wastewater (µg/L)	Sludge [#] (mg/kg)	Leachate [#] -
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-methoxypropylacetate	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.

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Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]								
	I001 (µg/L)	I002 (µg/L)	I003 [#] (mg/kg)	I004 [#] (mg/L)	I005 (µg/L)	Wastewater (µg/L)	Sludge [#] (mg/kg)	Leachate [#] -						
1M) Organotin Compounds														
Dipropyltin compounds (DPT)	ND	NR	NR	NR	NR	0,01	-	-						
Mono, di-, and tri-butyltin derivatives	ND													
Mono, di-, and tri-methyltin derivatives	ND													
Mono, di-, and tri-octyltin derivatives	ND													
Mono, di-, and tri-phenyltin derivatives	ND													
Tetrabutyltin compounds (TeBT)	ND													
Tripropyltin compounds (TPT)	ND													
Tetraoctyltin compounds (TeOT)	ND													
Tricyclohexyltin (TCyHT)	ND													
Tetraethyltin compounds (TeET)	ND													
1N) Other / Miscellaneous Chemicals														
AEEA [2-(2-aminoethylamino)ethanol]	ND				NR				NR	NR	NR	500	-	-
Bisphenol A	ND													
Thiourea	ND													
Quinoline	ND													
Borate, zinc salt ^c	ND													
Silica (used in sand blasting) ^d	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													
1P) Phthalates - including all other esters of ortho-phthalic acid														
1,2-benzenedicarboxylic acid, di-C6-8 branched and linear alkyl esters, C7-rich (DIHP)	ND	NR	NR	NR	NR	10	-	-						
1,2-benzenedicarboxylic acid, di-C7-11 branched and linear alkyl esters (DHNUP)	ND													
Bis(2-methoxyethyl)phthalate (DMEP)	ND													
Butyl benzyl phthalate (BBP)	ND													
Di-cyclohexyl phthalate (DCHP)	ND													
Di-iso-decyl phthalate (DIDP)	ND													
Di-iso-octyl phthalate (DIOP)	ND													
Di-iso-butyl phthalate (DIBP)	ND													
Di-iso-nonyl phthalate (DINP)	ND													
Di-n-hexyl phthalate (DnHP)	ND													
Di-n-octyl phthalate (DNOP)	ND													
Di-n-pentylphthalates	ND													
Di-n-propyl phthalate (DPRP)	ND													
Di(ethylhexyl) phthalate (DEHP)	ND													
Dibutyl phthalate (DBP)	ND													
Diethyl phthalate (DEP)	ND													
Diisopentylphthalates	ND													
Dinonyl phthalate (DNP)	ND													

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.



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Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 [#] (mg/kg)	I004 [#] (mg/L)	I005 (µg/L)	Wastewater (µg/L)	Sludge [#] (mg/kg)	Leachate [#] -
1Q) Polycyclic Aromatic Hydrocarbons (PAHs)								
Acenaphthene	ND		ND		NR			
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	NR	ND	NR	NR	1	0,2	-
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			
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-dimethoxybenzidine	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	NR	NR	NR	0,1	-	-
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			
Benzdine	ND				NR			
o-aminoazotoluene	ND				NR			
o-anisidine	ND				NR			
o-toluidine	ND				NR			

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Test Result - ZDHC MRSL Parameters (continued)

Test Parameters	Results of Test Items					Requirements [Textile]		
	I001 (µg/L)	I002 (µg/L)	I003 [#] (mg/kg)	I004 [#] (mg/L)	I005 (µg/L)	Wastewater (µg/L)	Sludge [#] (mg/kg)	Leachate [#] -
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

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Test Result - ZDHC Heavy Metals Parameters

Test Parameters	Unit			Results of Test Items					Requirements [Textile]				
	Wastewater	Sludge	Leachate	I001	I002	I003#	I004#	I005	Wastewater			Sludge	
									Foundational	Progressive	Aspirational	Discharge Limit	Sludge Threshold Values
ZDHC Heavy Metals													
Antimony	mg/L	mg/kg	mg/L	NR	NR	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	Not Applicable	50
Barium	mg/L	mg/kg	mg/L		NR	ND	NR	NR	Sample & Report			-	700
Selenium	mg/L	mg/kg	mg/L		NR	ND	NR	NR	Sample & Report			-	10
Tin	mg/L	-	-		NR	NR	NR	NR	Sample & Report			-	-
Arsenic	mg/L	mg/kg	mg/L		0.007	9	NR	NR	0,05	0,01	0,005	3	10
Total Chromium	mg/L	mg/kg	mg/L		NR	2998	0.1	NR	0,2	0,1	0,05	-	100
Cobalt	mg/L	mg/kg	mg/L		NR	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	2	3
Copper	mg/L	mg/kg	mg/L		NR	836	0.03	NR	1	0,5	0,25	-	200
Lead	mg/L	mg/kg	mg/L		ND	56	ND	NR	0,1	0,05	0,01	3	10
Nickel	mg/L	mg/kg	mg/L		NR	131	0.6	NR	0,2	0,1	0,05	-	70
Silver	mg/L	mg/kg	mg/L		NR	ND	NR	NR	0,1	0,05	0,005	-	100
Zinc	mg/L	mg/kg	mg/L		NR	6059	55	NR	5	1	0,5	-	1000
Mercury	mg/L	mg/kg	mg/L	ND	ND	NR	NR	0,01	0,005	0,001	0.2	1	

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Test Result - ZDHC Conventional and Anions Parameters

Test Parameters	Unit			Results of Test Items					Requirements [Textile]					
	Wastewater	Sludge	Leachate	I001	I002	I003#	I004#	I005	Wastewater			Sludge		
									Foundational	Progressive	Aspirational	Discharge Limit	Sludge Threshold Values	
ZDHC Conventional														
pH	pH					7.2				6 - 9			-	
Temparture difference	Δ °C									15	10	5	-	
E.coli	MPN/100-ml									126			-	
Colour (436 nm)	m ⁻¹									7	5	2	-	
Colour (525 nm)	m ⁻¹									5	3	1	-	
Colour (620 nm)	m ⁻¹									3	2	1	-	
Persistent Foam	-									No indication of Persistent Foam			-	
Wastewater Flowrate	m ³ /day									-			-	
Ammonium-Nitrogen	mg/L									10	1	0,5	-	
AOX	mg/L									3	0,5	0,1	-	
BOD ₅	mg/L	-				NR				30	15	8	-	
COD	mg/L			NR	NR		NR	NR		150	80	40	-	
DO	mg/L									Sample & Report			-	
Oil & Grease	mg/L									10	2	0,5	-	
Total Phenols / Phenol Index	mg/L									0,5	0,01	0,001	-	
Total Chlorine	mg/L									Sample & Report			-	
TDS	mg/L									-			-	
Total Nitrogen	mg/L									20	10	5	-	
Total Phosphorus	mg/L									3	0,5	0,1	-	
TSS	mg/L									50	15	5	-	
% Solids	-	%				29.78				-			-	
Paint Filter Test	-	-				Pass				-			-	
Fecal Coliform	-	MPN/g				6.67				-			-	
ZDHC Anions														
Chloride	mg/L	-	-			NR				Sample & Report			-	
Cyanide, total	mg/L	mg/kg	-			ND				0,2	0,1	0,05	-	
Sulfate	mg/L			NR	NR		NR	NR		Sample & Report			-	
Sulfide	mg/L	-	-			NR				0,5	0,5	0,01	-	
Sulfite	mg/L									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 - contract limit with CETP

13.05.2016 tarih 10 sayılı İzmir Büyükşehir Belediyesi İZSU Genel Kurul Kararı ve 02.06.2016 tarihli 9 Eylül Gazetesi yayımı ile yürürlüğe girmiştir.

EK.1: TABLO 1. Atıksuların Şehir Atıksu Altyapı Tesislerine Deşarjında Öngörülen Atıksu Standartları:

<u>Parametre</u>	<u>İZSU Standartları</u>	06.07.2021
Sıcaklık	40	
pH	6.5 – 9	
Askıda Katı Madde (AKM) (mg/lt)	350	
Yağ ve Gres (mg/lt)	100	
Kimyasal Oksijen İhtiyacı (KOl) (mg/lt)	800	
Sülfat (SO ₄) (mg/lt)	1000	
Sülfür (S=) (mg/lt)	2	
Fenol (mg/lt)	10	
Serbest Klor (S.Cl) (mg/lt)	5	
Arsenik (As) (mg/lt)	3	
Toplam Siyanür (Top.CN) (mg/lt)	10	
Kurşun (Pb) (mg/lt)	3	
Kadmiyum (Cd) (mg/lt)	2	
Toplam Krom (Cr) (mg/lt)	5	
Civa (Hg) (mg/lt)	0.2	
Bakır (Cu) (mg/lt)	2	
Nikel (Ni) (mg/lt)	5	
Çinko (Zn) (mg/lt)	10	
Kalay (Sn) (mg/lt)	5	
Katran ve Petrol Kökenli Yağlar (mg/lt)	50	
Klorür (Cl-) (mg/lt)	5000	
Gümüş (Ag) (mg/lt)	5	
Yüzey aktif madde	Biyolojik olarak parçalanmayan Yüzey Aktif Madde boşaltımı yasaktır.	



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Appendix B - Sample Photos

I001) Sampling point

N/S 38° 18' 38.04"; E/W 27° 9' 57.46"



I001) Sampling location surrounding

N/S 38° 18' 38.04"; E/W 27° 9' 57.46"



I001) Labelled sample bottles



I001) Sample for phthalate test



I001) Sample packaging



I002) Sampling point

N/S 38° 18' 38.04"; E/W 27° 9' 57.46"



I002) Sampling location surrounding

N/S 38° 18' 38.04"; E/W 27° 9' 57.46"



I002) Labelled sample bottles



I002) pH measurement



I002) Sample packaging





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Appendix B - Sample Photos (continued)

I003) Sampling point

N/S 38° 18' 38.04"; E/W 27° 9' 57.46"



I003) Sampling location surrounding

N/S 38° 18' 38.04"; E/W 27° 9' 57.46"



I003) Labelled sample bottles



I003) Sample packaging





**BUREAU
VERITAS**

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Appendix C - On-site Field Data Record Sheet

ZDHC Wastewater Sampling Field Data Form and Representative Sample Declaration		CPSD-AN-00613-DATA 07	
		Issue Date: February 29, 2024	
		Version No.: 1	
		Business Line: Analytical	
Attach the completed field data form in the test report!			
Facility Information			
Data of Sampling:	23.07.2024		
Sample Number (ZDHC Composite Sample Code):	72241300315		
Facility Name:	BETA KONFEKSİYON TEKSTİL İTH. SAN. TIC. LTD. Şİ.		
Facility Address:	FATİH MAHALLESİ EĞE CADDESİ NO:25 SARNIÇ GAZİEMİR/İZMİR		
Facility Type (tick all applicable):	<input checked="" type="checkbox"/> Dyeing and Finishing <input type="checkbox"/> Fabric Mill <input checked="" type="checkbox"/> Laundry, Washing and Finishing <input type="checkbox"/> Natural Leather processing <input type="checkbox"/> Printing <input type="checkbox"/> Synthetic Leather processing <input type="checkbox"/> Other (please specify)		
Discharge Type (tick applicable):	<input type="checkbox"/> Direct discharge <input checked="" type="checkbox"/> with pre-treatment <input checked="" type="checkbox"/> Indirect discharge <input type="checkbox"/> without pre-treatment <input type="checkbox"/> Zero liquid discharge (ZLD) <input type="checkbox"/> with own ETP		Other Notes:
Discharge Description:	<input type="checkbox"/> Discharge to environment (e.g. river, stream, sea etc.) <input type="checkbox"/> Other (please specify) <input checked="" type="checkbox"/> Sewage treatment plant		
Discharge Volume:	<input checked="" type="checkbox"/> ≥ 15m ³ per day <input type="checkbox"/> < 15m ³ per day		
Sample Type and Details			
Sample Type	Sample Details		
<input type="checkbox"/> Incoming Water			
<input checked="" type="checkbox"/> Untreated WW	<input checked="" type="checkbox"/> with equalisation tank (EQT) present Hydraulic Retention Time (HRT) (Hours): <u>8h</u> <small>= volume of tank (m³) / flow rate (m³/h) if HRT > 12 h, grab sampling from EQT is allowed.</small>		
<input checked="" type="checkbox"/> Effluent	<input type="checkbox"/> Direct <input checked="" type="checkbox"/> Indirect <input type="checkbox"/> Facility has WWTP <input type="checkbox"/> with equalisation tank (EQT) present <small>Enter sampling time(s) in page 2 and take field test measurements required except on direct</small> <input type="checkbox"/> Plant is in operating condition <small>Hydraulic Retention Time (HRT) (Hours):</small> <small>= volume of tank (m³) / flow rate (m³/h) if HRT > 12 h, grab sampling from EQT is allowed.</small>		
<input checked="" type="checkbox"/> Sludge	<small>Disposal Pathway (The pathway must be defined by the facility. If the facility cannot provide information, pathway "F" shall be assumed).</small> <input type="checkbox"/> A >100°C effluent incineration <input type="checkbox"/> B Landfill with significant control <input type="checkbox"/> C Building products processed >100°C <input type="checkbox"/> D Landfill with limited control <input type="checkbox"/> E Incinerator/ Building products processed >100°C <input type="checkbox"/> F Landfill with no control <input type="checkbox"/> G Land application <small>Sludge flux (weight/time) if applicable:</small>		
ZDHC Wastewater Sampling - Facility Confirmation			
<small>The wastewater samples have been collected under the facilities' normal production scale and wastewater flow rate. The sampler listed below was on-site and collected the samples. Sampling protocol for wastewater and sludge samples are in accordance with ZDHC SAP including appendix E. 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.</small>			
Facility Confirmation		Sampler Information	
Facility Name:	BETA KONFEKSİYON TEKSTİL İTH. SAN. TIC. LTD. Şİ.	Sampler's Name/ Email:	al-ozman.albayrak@bureauveritas.com
Facility Representative Name:	<u>Baris Jener</u>	Sampler's ZDHC Accredited No.:	ZDHC-A-22-E-C001068-R2340-7AG09
Facility Representative Signature and Stamp:	<u>Baris Jener</u> 23.07.2024	Sampler's Signature:	<u>Al-Ozman Albayrak</u>
Date:	<u>23.07.2024</u>	Date:	<u>23.07.2024</u>

BETA KONFEKSİYON
 TEKSTİL İTH. İTH. SAN. VE TIC. LTD. ŞTİ.
 Fatih Mahallesi Ege Caddesi No:25
 Sarnıç - Gazîemir - İZMİR
 Şişme V.D. V.No: 187 035 8304
 Tic.Sicil No: 106898

BETA KONF. SAHA FORMU

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

ZDHC Wastewater Sampling Field Data Form and Representative Sample Declaration									
CPSD-AN-0613-DATA 07									
Issue Date: _____									
Version No.: 1									
Business Line: Analytical									
ZDHC Wastewater Flow Device Dimensions									
Measurement (cm)	Meter	Pipe (Ø)	Flume (U)	Wier (V)					
Diameter	--	--	--	--					
Depth	--	--	--	--					
ZDHC Wastewater Sampling Field Testing ICAI QC									
Parameter	Lab Control Sample (LCS) Known	Lab Control Sample (LCS) Measured	Accuracy (%)						
pH									
Total Chlorine									
ZDHC Wastewater Sample Collection Field Test Measurements									
Incoming Sample Point	<input type="radio"/> Composite Sample <input type="radio"/> Grab Sample		Start Time: _____	Stop Time: _____					
Sampling Locations:	GPS coordinates: Lat.: N / S		Long.: E / W						
Sampling Mode:	<input type="radio"/> Manual <input type="radio"/> Autosampler - Sampling Device Description/ Owner:								
Sampling Time (Hours)	0	1	2	3	4	5	6	Average	
Recording time of discrete sample	---	---	---	---	---	---	---	---	
Colour (visual estimation):	---	---	---	---	---	---	---	---	
Untreated Sample Point	<input checked="" type="radio"/> Composite Sample <input type="radio"/> Grab Sample		Start Time: 10:45	Stop Time: 16:50					
Sampling Locations:	GPS coordinates: Lat.: N / S		Long.: E / W						
Sampling Mode:	<input checked="" type="radio"/> Manual <input type="radio"/> Autosampler - Sampling Device Description/ Owner:								
Sampling Time (Hours)	0	1	2	3	4	5	6	Average	
Recording time of discrete sample	10:50	11:50	12:50	13:50	14:50	15:50	16:50	--	
Colour (visual estimation):	Black	Black	Black	Black	Black	Black	Black	---	
Effluent Sample Point	<input checked="" type="radio"/> Composite Sample <input type="radio"/> Grab Sample		Start Time: 10:55	Stop Time: 17:00					
Sampling Locations:	GPS coordinates: Lat.: N / S		Long.: E / W						
Sampling Mode:	<input checked="" type="radio"/> Manual <input type="radio"/> Autosampler - Sampling Device Description/ Owner:								
Sampling Time (Hours)	0	1	2	3	4	5	6	Average	
Recording time of discrete sample	11:00	12:00	13:00	14:00	15:00	16:00	17:00	--	
Temperature (°C):	WW Discharge	31.8	32.3	32.9	33.3	33.7	33.9	34.1	
	Receiving Water	---	---	---	---	---	---	---	
pH:		7.73	7.73	7.71	7.69	7.67	7.65	7.67	
Dissolved Oxygen (mg/L):		---	---	---	---	---	---	---	
Total Chlorine (mg/L):		---	---	---	---	---	---	---	
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): (m ³ /h)		2.90	3.06	2.91	3.52	3.61	3.54	3.34	
Alternate Measured Flow:	Depth (cm)	---	---	---	---	---	---	---	
	Velocity (cm/sec)	---	---	---	---	---	---	---	
Colour (visual estimation):		Light Yellow	Yellow	L. Yellow	Orange	Orange	Brown	Orange	
Volume collected (L):		---	---	---	---	---	---	---	
Total volume collected (L):	Collected 3.33-litres each hour for a total minimum volume of 20-litres								
Sludge Sample Point	<input type="radio"/> Composite Sample <input type="radio"/> Grab Sample		Start Time: 14:10	Stop Time: 14:45					
Sampling Locations:	GPS coordinates: Lat.: N / S		Long.: E / W						
Sampling Mode:	<input checked="" type="radio"/> Manual <input type="radio"/> Autosampler - Sampling Device Description/ Owner:								
Sampling Time (Hours)	0	1	2	3	4	5	6	Average	
Recording time of discrete sample	14:30	---	---	---	---	---	---	---	
Colour (visual estimation):		Brown	---	---	---	---	---	---	
Comments/ Other Observations									



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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		
1C) Chlorinated Paraffins						
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				
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)						
Monobromodiphenylethers (MonoBDEs)			Multiple			
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)						
Tripopyltin 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		
Thiourea			62-56-6	50		Liquid extraction, LC-MS
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-dimethoxybenzidine			119-90-4							
4-aminoazobenzene			60-09-3							
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;			39156-41-7							
2,4-diaminoanisole sulphate			615-05-4							
4-methoxy-m-phenylenediamine			95-80-7							
4-methyl-m-phenylenediamine			101-14-4							
4,4-methylene-bis-(2-chloro-aniline)			838-88-0							
4,4-methylenedi-o-toluidine			101-77-9							
4,4-methylenedianiline			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							
Reduction step with sodium dithionite, solvent extraction EPA 8270E and ISO 14362-1 GC/MS and LC/MS/MS										



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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 determination	
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				

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		With reference to ISO 10523, EPA 150.2, APHA 4500-H+
Temperature difference	°C			-		USEPA 170.1 or GB/T 13195
E.coli	MPN/100-ml			126		-
Colour	m ⁻¹			2;1;1		ISO 7887 (Method A and B)
Persistent Foam	-			-		-
Wastewater Flowrate	m ³ /day			-		-
Ammonium-Nitrogen	mg/L			0,5		ISO 11732, ISO 7150, USEPA 350.1, APHA 4500 NH ³ -N, HJ 535 or HJ 536
AOX	mg/L			0,1		ISO 9562, EN ISO 9563, USEPA 1650, HJ.T 83-2001
Biochemical Oxygen Demand 5-days concentration (BOD ₅)	mg/L			8		ISO 5815-1 & -2, EN1899-1, USEPA 405.1, APHA 5210B or HJ 505
Chemical Oxygen Demand (COD)	mg/L			40		ISO 6060, USEPA 410.4, APHA 5220D or GB/T 11914
Dissolved Oxygen (DO)	mg/L			-		ISO 5814, EPA 360.1 or HJ 506
Oil & Grease	mg/L			0,5		ISO 9377-2, USEPA 1664 or HJ 637
Total Phenols / Phenol Index	mg/L			0,001		ISO 14402, APHA 5530B, C, D or HJ 503
Total Chlorine	mg/L			0,1		ISO 7393-2, EPA 330.5 or HJ 586
Total Dissolved Solids (TDS)	mg/L			5		APHA 2540C, GB/T 5750.4
Total Nitrogen	mg/L			5		ISO 5663, ISO 29411, USEPA 351.2, APHA 4500P-J, APHA 4500N-C/ HJ 636 or GB 11891
Total Phosphorus	mg/L			0,1		ISO 11885, ISO 6878, USEPA 365.4, APHA 4500P-J or GB/T 11893
Total Suspended Solids (TSS)	mg/L			5		ISO 11923, USEPA 160.2, APHA 2540D or GB/T 11901
% Solids	-	%				USEPA 160.3, HJ 613
Paint Filter Test	-	-				EPA SW-846 or EPA 9095B
Fecal Coliform	-	bacteria/100m				EPA 1681



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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	
Anions						
Chloride	mg/L	-	-	-	-	ISO 10304-1, ISO 15923-1, USEPA 300, HJ 84-2016, IS 3025 (part 32)
Cyanide, total		mg/kg		0,05	20	ISO 6703-1 & 2, ISO 14403-1 & 2, USEPA 335.2, APAH 4500-CN or HJ 484
Sulfate		-		-	-	ISO 10304-1, ISO 15923-1, USEPA 300, HJ 84-2016, IS 3025 (part 24)
Sulfide		-		0,01	-	ISO 10530, SM 4500-S2-D, E, G or I, GB/T 16489 or IS 3025 (part 29), HJ 1226-2021
Sulfite		-		0,2	-	ISO 10304-3, SM 4500-SO32-C or HJ 84-2016

END OF REPORT