Date of sampling	20/07/2023
Reporting date	27/07/2023

Audit ID	146122	**Audit firm**	SGS TURKEY
Company name	YILTEKS YIK. SAN. VE TIC.AS.		
Contact person	İREM KARA		
Type of tax – tax ID no	9790407459		
Address	HACI SELEMET MEVKII 5. SK		
Region state province	TEKİRDAĞ		
Town city / village	CORLU		
Zip / Post code	/		

Type of wastewater discharge	
Type of wastewater discharge	Direct Discharge
Description of the discharge	Discharge to Çorlu Lake
[If direct discharge] Temperature of receiving water body:	35

Type of sludge disposal pathway	
Type of sludge disposal pathway	C

Sampler accreditation certification number (ZDHC):	**8F1465016562**
Sampling affiliate	**SGS Turkey**

Sample description

	Simple	Composite	Comments
(1) Untreated wastewater	NO	YES – 11:00-17:00	NO
(2) Effluent	YES – 11:00	NO	NO
(3) Sludge	YES – 13:00	NO	NO
(4) Leachate	NO	NO	NO

Internal description – Final Test Report	
Testing laboratory	SGS Turkey
Internal codification number (report number)	TR2327930
Reference sample number (sample ID)	/
Received on	21/07/2023
Analysis carried out from	21/07/2023 to 27/07/2023
Arrival temperature at lab	7.8 ºC
Comments	/
Reporting date	27/07/2023

The test results relate to the tested items only.
Test reports without SGS seal and authorized signatures are invalid.

Issued in Istanbul
Signed for and on behalf of
SGS Supervise Gözetme Etüd Kontrol Servisleri A.Ş.

Mesut Akpolat Customer Services Supervisor	Murat Öztaş Customer Services Team Leader

Notes

SGS Supervise Gözetme Etüd Kontrol Servisleri A.Ş.-Tüketici ve Perakende Laboratuvarı (Consumer and Retail) operating as ZDHC tests is accredited by TÜRKAK according to AB-690-T and ISO/IEC 17025:2017 standard.
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SGS applied shared risk decision rule.
SGS does not verify authenticity of any Brand/Trademark of products. Buyers must check if the product is genuine with the Brand/Trademark owner directly.
Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.
Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. Unless further specified in an individual contract the sample(s) retention time is 30 days.
In this Test Report tests marked (1) are included in the TURKAK Accreditation Scope of this Laboratory.

Summary of test results				
Test items	**Untreated wastewater**	**Effluent**	**Sludge**	**Leachate**
Conventional Parameters and Anions	-	**Exceed Foundational Limit@**	**Please refer to the information in TEST RESULTS**	-
Heavy Metals	-	**Fulfill Aspirational Limit**	**Please refer to the information in TEST RESULTS**	-
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers	**ND**	-	**ND**	-
Anti- Microbials & Biocides	**ND**	-	-	-
Chlorinated Paraffins	**ND**	-	-	-
Chlorobenzenes & Chlorotoluenes	**ND**	-	**ND**	-
Chlorophenols	**ND**	-	-	-
N,N-di-methylformamide (DMFa)	**ND**	-	-	-
Dyes – Carcinogenic or Equivalent Concern	**ND**	-	-	-
Dyes – Disperse (Allergenic)	**ND**	-	-	-
Dyes – Navy Blue Colourant	**ND**	-	-	-
Flame Retardants	**ND**	-	-	-
Glycols / Glycol Ethers	**ND**	-	-	-
Halogenated Solvents	**ND**	-	-	-
Organotin Compounds	**ND**	-	-	-
Other / Miscellaneous Chemicals	**D**	-	-	-
Perfluorinated and Polyfluorinated Chemicals (PFCs)	**ND**	-	-	-
Phthalates – including all other esters of ortho-phthalic acid	**ND**	-	-	-
Polycyclic Aromatic Hydrocarbons (PAHs)	**ND**	-	**ND**	-
Restricted Aromatic Amines (Cleavable from Azo-colourants)	**D**	-	-	-
UV Absorbers	**ND**	-	-	-
VOCs	**ND**	-	-	-

Remark (Indicated in each parameter)

ND = Not detected
D = Detected
NA = Not applicable
NC = Not conducted
- = Not required to be tested
@ = Maximum holding time exceeded
(T) = handling temperature exceeded

Test results

Wastewater

1. Conventional Parameters and Anions

Test Items	Test method	Limit			Reporting Limit	Result	Unit
		Foundational	Progressive	Aspirational		Effluent	
pH	ISO 10523, USEPA 150.1, SM 4500 H+, HJ 1147 or IS 3025 (Part 11) - Electrometric method only	Textile and Leather: 6-9			NA	7,81 (f)	-
Temperature Difference	DIN 38 404-4, USEPA 170.1, SM 2550, GB/T 13195 or IS 3025 (Part 9)	Textile and Leather: Δ+15	Textile and Leather: Δ+10	Textile and Leather: Δ+5	NA	NC* (f)	ºC
E. Coli	SM 9221 B presumptive, confirm positive with SM 9221 F or G	Textile and Leather: 126			126	170	MPN/100mL
Colour (436nm; 525nm; 620nm)	ISO 7887 B	Textile and Leather: 7;5;3	Textile and Leather: 5;3;2	Textile and Leather: 2;1;1	NA	4.82;2.92;1.94	m^{-1}
Persistent Foam	-	Textile and Leather: Not visible			NA	Not Visible	-
Wastewater Flowrate	-	-			NA	349,42 (f)	m^3/day
Ammonium-Nitrogen	ISO 7150, ISO 11732, USEPA 350.1, USEPA 350.3, SM 4500 NH3 D, E, F, G or H, HJ 535 or IS 3025 (Part 34) - Phenate or ammonia selective electrode only	Textile: 10 Leather: 15	Textile: 1 Leather: 10	Textile: 0.5 Leather: 1	0.5	ND	mg/L
AOX	ISO 9562, HACH LCK 390 or HJ/T 83-2001	Textile: 3	Textile: 0.5	Textile: 0.1	0.1	ND	mg/L
Biochemical Oxygen Demand 5-days concentration (BOD_5)	ISO 5815-1, USEPA 405.1, SM 5210 B, HJ 505 or IS 3025 (Part 44) - Seeded dilution water (BOD_5)	Textile: 30 Leather: 50	Textile: 15 Leather: 30	Textile: 8 Leather: 20	5	ND	mg/L
Chemical Oxygen Demand (COD)	ISO 6060, ISO 15705, USEPA 410.4, SM 5220 D, HJ 828, GB/T 11914 or IS 3025 (Part 58)	Textile: 150 Leather: 250	Textile: 80 Leather: 150	Textile: 40 Leather: 100	40	ND	mg/L
Dissolved Oxygen (DO)	ISO 5814, USEPA 360.1, SM 4500 O G or HJ 506	Textile and Leather: Sample and report only			0.5	7,02 (f)	mg/L
Oil and grease	ISO 9377-2, USEPA 1664 Revision B, SM 5520 B or C, HJ 637 - Total oil and grease or IS 3025 (Part 39) - Partition gravimetric or partition infra-red	Textile: 10 Leather: 20	Textile: 2 Leather: 10	Textile: 0.5 Leather: 5	0.5	ND	mg/L

Total Phenols / Phenol Index	ISO 6439, SM 5530 B or C, HJ 503 or IS 3025 (Part 43)	Textile and Leather: 0.5	Textile:0.01 Leather: 0.3	Textile: 0.001 Leather: 0.1	0.001	0,58	mg/L
Total Chlorine	ISO 7393-2, USEPA 330.5, SM 4500 Cl- G or HJ 586	Textile and Leather: Sample and report only			0.5	ND	mg/L
Total Dissolved Solids (TDS)	USEPA 160.1, SM 2540 C, GB/T 5750.4-2006 (180°C centigrade) or IS 3025 (Part 16) 179°C to 181°C	Textile and Leather: Sample and report only			50	1184	mg/L
Total Nitrogen	ISO 11905 - Part 1, ISO 29441, USEPA 351.2, SM 4500 P J, SM 4500 N B, C, HJ 636 or IS 3025 (Part 34) (Ammonia, nitrate, nitrite, organic)	Textile: 20 Leather: 35	Textile: 10 Leather: 20	Textile: 5 Leather: 10	5	5,05	mg/L
Total Phosphorus	ISO 6878, ISO 11885, ISO 17294, USEPA 200.7, USEPA 200.8, USEPA 365.4, USEPA 6010 C, USEPA 6020 A, SM 4500 P J, GB/T 11893, IS 3025 (Part 31) or IS 3025 (Part 65)	Textile and Leather: 3	Textile: 0.5 Leather: 1	Textile: 0.1 Leather: 0.5	0.1	1,07	mg/L
Total Suspended Solids (TSS)	ISO 11923, USEPA 160.2, SM 2540 D, GB/T 11901 or IS 3025 (Part 17) 103°C to 105°C	Textile: 50 Leather: 70	Textile: 15 Leather: 50	Textile: 5 Leather: 20	5	30	mg/L
Chloride	ISO 10304-1, ISO 15923-1, USEPA 300, SM 4110 B, C, SM 4500 Cl D or E, HJ 84-2016 or IS 3025 (Part 32) - Potentiometric or automated ferricyanide only	Textile and Leather: Sample and report only			1	703	mg/L
Cyanide	ISO 6703-1, -2, -3, ISO 14403-1, -2, USEPA 335.2, SM 4500 CN or HJ 484	Textile: 0.2	Textile: 0.1	Textile: 0.05	0.05	ND	mg/L
Sulfate	ISO 10304-1, ISO 15923-1, USEPA 300, USEPA 9038, SM 4110 B, C, SM 4500 SO_4^{2-} E, F, G, HJ 84-2016 or IS 3025 (Part 24)	Textile and Leather: Sample and report only			5	80	mg/L
Sulfide	ISO 10530, SM 4500 S^{2-} D, E, G or I, HJ 1226 or IS 3025 (Part 29) - Methylene blue only	Textile: 0.5 Leather: 1	Textile: 0.05 Leather: 0.5	Textile: 0.01 Leather: 0.2	0.01	0,019	mg/L
Sulfite	ISO 10304-3, SM 4500 SO_3^{2-} C or HJ 84-2016	Textile: 2	Textile: 0.5	Textile: 0.2	0.2	ND	mg/L

Remark

ND = Not detected
NA = Not applicable
NC = Not conducted
- = Not required to be tested
(f) = Parameter tested in field
(S) = The analysis was subcontracted to xxxxx lab for testing.
= Non accredited parameter
* sampling location of receiving body of water upstream is inaccessible due to the safety issue

2. Heavy Metals

Cr (VI): ISO 18412, USEPA 218.6, GB 7467 or IS 3025 (Part 52)
Ba, Se, Sn: USEPA 200.8, USEPA 6010 C, USEPA 6020 A or HJ 700
Sb, As, Cr, Co: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, HJ 700 or IS 3025 (Part 65)
Cd: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, GB 7475, HJ 700, IS 3025 (Part 65) or IS 3025 (Part 41) – AAS instrumental method
Cu: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, GB 7475, HJ 700, IS 3025 (Part 65) or IS 3025 (Part 42) – AAS instrumental method
Pb: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, GB 7475, HJ 700, IS 3025 (Part 65) or IS 3025 (Part 47) – AAS instrumental method
Ni: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, GB 11912, HJ 700, IS 3025 (Part 65) or IS 3025 (Part 54) – AAS instrumental method
Ag: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, GB 11907, HJ 700 or IS 3025 (Part 65)
Zn: ISO 17294, USEPA 200.8, USEPA 6010 C, USEPA 6020 A, GB 7472, GB 7475, HJ 700, IS 3025 (Part 65) or IS 3025 (Part 49) – AAS instrumental method
Hg: ISO 17294, USEPA 200.8 – SIM, USEPA 245.1, USEPA 245.7, USEPA 6020 A – SIM, HJ 597, HJ 694, IS 3025 (Part 48) – Cold vapour AAS only or IS 3025 (Part 65) – SI

Test items	CAS no.	Foundational	Progressive	Aspirational	Reporting Limit	Effluent	Unit
Arsenic (As)	Various	Textile and Leather: 0.05	Textile and Leather: 0.01	Textile and Leather: 0.005	0.005	ND	mg/L
Cadmium (Cd)	Various	Textile and Leather: 0.1	Textile and Leather: 0.05	Textile and Leather: 0.01	0.01	ND	mg/L
Mercury (Hg)	Various	Textile and Leather: 0.01	Textile and Leather: 0.005	Textile and Leather: 0.001	0.001	ND	mg/L
Lead (Pb)	Various	Textile and Leather: 0.1	Textile and Leather: 0.05	Textile and Leather: 0.01	0.01	ND	mg/L
Antimony (Sb) *	Various	Textile and Leather: 0.1	Textile and Leather: 0.05	Textile and Leather: 0.01	0.01	ND	mg/L
Cobalt (Co)	Various	Textile and Leather: 0.05	Textile and Leather: 0.02	Textile and Leather: 0.01	0.01	ND	mg/L
Nickel (Ni)	Various	Textile and Leather: 0.2	Textile and Leather: 0.1	Textile and Leather: 0.05	0.05	ND	mg/L
Silver (Ag)	Various	Textile and Leather: 0.1	Textile and Leather: 0.05	Textile and Leather: 0.005	0.005	ND	mg/L
Copper (Cu)	Various	Textile and Leather: 1	Textile and Leather: 0.5	Textile and Leather: 0.25	0.25	ND	mg/L
Zinc (Zn)	Various	Textile and Leather: 5	Textile and Leather: 1	Textile and Leather: 0.5	0.1	ND	mg/L
Total Chromium (Cr)	Various	Textile: 0.2 Leather: 1.5	Textile: 0.1 Leather: 0.8	Textile: 0.05 Leather: 0.3	0.05	ND	mg/L
Chromium VI (Cr VI)	Various	Textile: 0.05 Leather: 0.15	Textile: 0.005 Leather: 0.05	Textile: 0.001 Leather: 0.02	0.001	ND	mg/L
Barium (Ba)	Various	Textile: Sample and report only			35	ND	mg/L
Selenium (Se)	Various	Textile: Sample and report only			0.5	ND	mg/L
Tin (Sn)	Various	Textile: Sample and report only			0.1	ND	mg/L

Remark
ND = Not detected
NA = Not applicable
NC = Not conducted
- = Not required to be tested
(S) = The analysis was subcontracted to xxxxx lab for testing.
= Non accredited parameter
*= Sample and report only for polyester wet processing facilities

3. Alkylphenol (AP) & Alkylphenol Ethoxylates (APEOs): including all isomers

NP/OP: With reference to ISO 18857-2 (Modified dichloromethane extraction) or ASTM D7065 (GC-MS or LC-MS(-MS))
NPEO / OPEO: With reference to ISO 18857-2 or ASTM D7742

Test items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Octylphenol (OP)	140-66-9/ 1806-26-4/ 27193-28-8	5	ND	µg/L
Nonylphenol (NP)	104-40-5/ 11066-49-2/ 25154-52-3/84852-15-3	5	ND	µg/L
Octylphenolethoxylates (OPEOs)	9002-93-1/9036-19-5/68987-90-6	5	ND	µg/L
Nonylphenolethoxylates (NPEOs)	9016-45-9/26027-38-3/ 37205-87-1/68412-54-4/127087-87-0	5	ND	µg/L

4. Anti- Microbials & Biocides

o-Phenylphenol (+salts): With reference to BS EN 12673-1999, USEPA 8270 E or Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS

Triclosan: With reference to BS EN 12673-1999, USEPA 8270 E or Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS

Permethrin: With reference to ISO 14154:2005, USEPA 8270 E, Solvent extraction followed by GC-MS or An alternative method, without derivatization and determination by LC-MS / LC-MS/MS

Test items	CAS no.	Reporting Limit	Result	Unit
			Untreated wastewater	
o-Phenylphenol (+salts)	90-43-7	Textile: 100	ND	µg/L
Triclosan	3380-34-5	Textile and Leather: 100	ND	µg/L
Permethrin	Various	Textile and Leather: 500	ND	µg/L

5. Chlorinated Paraffins

MCCPs: Preparation: With reference to USEPA 3510. Analysis: With reference to ISO 18219-2:2021 or Method for MCCP with GC-MS(NCI) or LC-MS/MS.

SCCPs: Preparation: With reference to USEPA 3510. Analysis: With reference to ISO 12010:2019, ISO 18219-1:2021 or Method for SCCP with GC-MS(NCI) or LC-MS/MS

Test items	CAS no.	Reporting Limit	Result	Unit
			Untreated wastewater	
Short chain chlorinated paraffins (C10-C13)	85535-84-8	Textile and Leather: 25	ND	µg/L
Medium-chain Chlorinated Paraffins (MCCPs) (C14-C17)	85535-85-9	Textile and Leather: 500	ND	µg/L

6. Chlorobenzenes & Chlorotoluenes

With reference to USEPA 8260 D, USEPA 8270 E, Purge and Trap, Headspace or Dichloromethane extraction followed by GC-MS

Test items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Monochlorobenzenes	108-90-7	0.2	ND	µg/L
1,2-Dichlorobenzene	95-50-1	0.2	ND	µg/L
1,3-Dichlorobenzene	541-73-1	0.2	ND	µg/L
1,4-Dichlorobezene	106-46-7	0.2	ND	µg/L
1,2,3-Trichlorobenzene	87-61-6	0.2	ND	µg/L
1,2,4-Trichlorobenzene	120-82-1	0.2	ND	µg/L
1,3,5-Trichlorobenzene	108-70-3	0.2	ND	µg/L
1,2,3,4-Tetrachlorobenzene	634-66-2	0.2	ND	µg/L
1,2,3,5-Tetrachlorobenzene	634-90-2	0.2	ND	µg/L
1,2,4,5-Tetrachlorobenzene	95-94-3	0.2	ND	µg/L
Pentachlorobenzene	608-93-5	0.2	ND	µg/L
Hexachlorobenzene	118-74-1	0.2	ND	µg/L
2-Chlorotoluene	95-49-8	0.2	ND	µg/L
3-Chlorotoluene	108-41-8	0.2	ND	µg/L
4-Chlorotoluene	106-43-4	0.2	ND	µg/L
2,3-Dichlorotoluene	32768-54-0	0.2	ND	µg/L

2,4-Dichlorotoluene	95-73-8	0.2	ND	µg/L
2,5-Dichlorotoluene	19398-61-9	0.2	ND	µg/L
2,6-Dichlorotoluene	118-69-4	0.2	ND	µg/L
3,4-Dichlorotoluene	95-75-0	0.2	ND	µg/L
3,5-Dichlorotoluene	25186-47-4	0.2	ND	µg/L
2,3,4-Trichlorotoluene	7359-72-0	0.2	ND	µg/L
2,3,6-Trichlorotoluene	2077-46-5	0.2	ND	µg/L
2,4,5-Trichlorotoluene	6639-30-1	0.2	ND	µg/L
2,4,6-Trichlorotoluene	23749-65-7	0.2	ND	µg/L
3,4,5-Trichlorotoluene	21472-86-6	0.2	ND	µg/L
2,3,4,5-Tetrachlorotoluene	76057-12-0	0.2	ND	µg/L
2,3,5,6-Tetrachlorotoluene	29733-70-8	0.2	ND	µg/L
2,3,4,6-Tetrachlorotoluene	875-40-1	0.2	ND	µg/L
Pentachlorotoluene	877-11-2	0.2	ND	µg/L

7. Chlorophenols

With reference to BS EN 12673-1999, USEPA 8270 E or Solvent extraction, derivatization with KOH, acetic anhydride followed by GC-MS

Test items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
2-Chlorophenol	95-57-8	0.5	ND	µg/L
3-Chlorophenol	108-43-0	0.5	ND	µg/L
4-Chlorophenol	106-48-9	0.5	ND	µg/L
2,3-Dichlorophenol	576-24-9	0.5	ND	µg/L
2,4-Dichlorophenol	120-83-2	0.5	ND	µg/L
2,5-Dichlorophenol	583-78-8	0.5	ND	µg/L
2,6-Dichlorophenol	87-65-0	0.5	ND	µg/L
3,4-Dichlorophenol	95-77-2	0.5	ND	µg/L
3,5-Dichlorophenol	591-35-5	0.5	ND	µg/L
2,3,4-Trichlorophenol	15950-66-0	0.5	ND	µg/L
2,3,5-Trichlorophenol	933-78-8	0.5	ND	µg/L
2,3,6-Trichlorophenol	933-75-5	0.5	ND	µg/L
2,4,5-Trichlorophenol	95-95-4	0.5	ND	µg/L
2,4,6-Trichlorophenol	88-06-2	0.5	ND	µg/L
3,4,5-Trichlorophenol	609-19-8	0.5	ND	µg/L
2,3,5,6-Tetrachlorophenol	935-95-5	0.5	ND	µg/L
2,3,4,6-Tetrachlorophenol	58-90-2	0.5	ND	µg/L
2,3,4,5-Tetrachlorophenol	4901-51-3	0.5	ND	µg/L
Pentachlorophenol PCP	87-86-5	0.5	ND	µg/L

8. N,N-di-methylformamide (DMFa)

With reference to USEPA 8015 or USEPA 8270 E

Test item	CAS no.	Reporting Limit (Textile)	Result	Unit
			Untreated wastewater	
N,N-di-methylformamide (DMFa)	68-12-2	1000 (Sample and Report only for mock leather)	ND	µg/L

9. Dyes - Carcinogenic or Equivalent Concern

With reference to Liquid extraction followed by LC-MS

Test items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
C.I. Direct Black 38	1937-37-7	500	ND	µg/L
C.I. Direct Blue 6	2602-46-2	500	ND	µg/L
C.I. Acid Red 26	3761-53-3	500	ND	µg/L
C.I. Basic Red 9	569-61-9	500	ND	µg/L
C.I. Direct Red 28	573-58-0	500	ND	µg/L
C.I. Basic Violet 14	632-99-5	500	ND	µg/L
C.I. Disperse Blue 1	2475-45-8	Textile: 500	ND	µg/L
C.I. Disperse Blue 3	2475-46-9	Textile: 500	ND	µg/L
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	2580-56-5	500	ND	µg/L
C.I. Basic Green 4 (malachite green chloride)	569-64-2	500	ND	µg/L
C.I. Basic Green 4 (malachite green oxalate)	2437-29-8	500	ND	µg/L
C.I. Basic Green 4 (malachite green)	10309-95-2	500	ND	µg/L
Disperse Orange 11	82-28-0	Textile: 500	ND	µg/L
Basic violet 3 with >0.1% of Michler´s Ketone*	548-62-9	500	ND	µg/L
C.I. Acid Violet 49	1694-09-3	500	ND	µg/L

*Reported concentration refers to the dye part only

10. Dyes - Disperse (Allergenic)

With reference to Liquid extraction followed by LC-MS

Test Items	CAS no.	Reporting Limit (Textile)	Result	Unit
			Untreated wastewater	
Disperse Yellow 1	119-15-3	50	ND	µg/L
Disperse Blue 102	12222-97-8	50	ND	µg/L
Disperse Blue 106	12223-01-7	50	ND	µg/L
Disperse Yellow 39	12236-29-2	50	ND	µg/L
Disperse Orange 37/59/76	13301-61-6	50	ND	µg/L
Disperse Brown 1	23355-64-8	50	ND	µg/L
Disperse Orange 1	2581-69-3	50	ND	µg/L
Disperse Yellow 3	2832-40-8	50	ND	µg/L
Disperse Red 11	2872-48-2	50	ND	µg/L
Disperse Red 1	2872-52-8	50	ND	µg/L
Disperse Red 17	3179-89-3	50	ND	µg/L
Disperse Blue 7	3179-90-6	50	ND	µg/L
Disperse Blue 26	3860-63-7	50	ND	µg/L
Disperse Yellow 49	54824-37-2	50	ND	µg/L
Disperse Blue 35	12222-75-2	50	ND	µg/L
Disperse Blue 124	61951-51-7	50	ND	µg/L
Disperse Yellow 9	6373-73-5	50	ND	µg/L
Disperse Orange 3	730-40-5	50	ND	µg/L
Disperse Blue 35	56524-77-7	50	ND	µg/L

11. Dyes - Navy Blue Colourant

With reference to Liquid extraction followed by LC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Component 1: C39H23Cl-CrN7O12S 2Na	118685-33-9	500	ND	µg/L
Component 2: C46H-30CrN10O20S2 3Na	Not Allocated	500	ND	µg/L

12. Flame retardants

Boric acid, Diboron trioxide, Disodium octaborate, Disodium tetraborate anhydrous, Tetraboron disodium heptaoxide, hydrate:

ISO 17294, USEPA 6010 C, USEPA 6020 A, HJ 700 or IS 3025 (Part 65)

Others: With reference to ISO 22032, USEPA 527, USEPA 8270 E, USEPA 8321 B or Dichloromethane extraction followed by GC-MS or LC-MS(-MS)

Test Items	CAS no.	Reporting Limit	Result	Unit
			Untreated wastewater	
Decabromodiphenyl ether (DecaBDE)	1163-19-5	Textile: 25 Leather: 5	ND	µg/L
Pentabromodiphenyl ether (PentaBDE)	32534-81-9	Textile: 25 Leather: 5	ND	µg/L
Octabromodiphenyl ether (OctaBDE)	32536-52-0	Textile: 25 Leather: 5	ND	µg/L
Tris(1-aziridinylphosphine oxide) (TEPA)	545-55-1	Textile: 25 Leather: 5	ND	µg/L
Polybromobiphenyls (PBBs)	59536-65-1	Textile: 25 Leather: 5	ND	µg/L
Tris(2,3-dibromopropyl phosphate) (TRIS)	126-72-7	Textile: 25 Leather: 5	ND	µg/L
Tetrabromobisphenol A (TBBPA)	79-94-7	Textile: 25 Leather: 5	ND	µg/L
Bis(2,3-dibromopropyl) phosphate	5412-25-9	Textile: 25 Leather: 5	ND	µg/L
Hexabromocyclododecane (HBCDD)	3194-55-6	Textile: 25 Leather: 5	ND	µg/L
2,2-Bis(bromomethyl)-1,3-propanediol (BBMP)	3296-90-0	Textile: 25 Leather: 5	ND	µg/L
Tris-(2-chloro-1-methylethyl) phosphate (TCPP)	13674-84-5	Textile: 25 Leather: 5	ND	µg/L
Decabromobiphenyl (DecaBB)	13654-09-6	Textile: 25	ND	µg/L
Dibromobiphenyls (DiBB)	Multiple	Textile: 25	ND	µg/L
Octabromobiphenyls (OctaBB)	Multiple	Textile: 25	ND	µg/L
Dibromopropylether	21850-44-2	Textile: 25	ND	µg/L
Heptabromodiphenyl ether (HeptaBDE)	68928-80-3	Textile: 25	ND	µg/L
Hexabromodiphenyl ether (HexaBDE)	36483-60-0	Textile: 25	ND	µg/L
Monobromobiphenyls (MonoBB)	Multiple	Textile: 25	ND	µg/L
Monobromodiphenylethers (MonoBDEs)	Multiple	Textile: 25	ND	µg/L
Nonabromobiphenyls (NonaBB)	Multiple	Textile: 25	ND	µg/L
Nonabromodiphenyl ether (NonaBDE)	63936-56-1	Textile: 25	ND	µg/L
Tetrabromodiphenyl ether (TetraBDE)	40088-47-9	Textile: 25	ND	µg/L
Tribromodiphenylethers (TriBDEs)	Multiple	Textile: 25	ND	µg/L
Boric acid	10043-35-3 11113-50-1	Textile: 100*	ND (ND)**	µg/L
Diboron trioxide	1303-86-2	Textile: 100*	ND (ND)**	µg/L
Disodium octaborate	12008-41-2	Textile: 100*	ND (ND)**	µg/L

Disodium tetraborate anhydrous	1303-96-4 1330-43-4	Textile: 100*	ND (ND)**	µg/L
Tetraboron disodium heptaoxide, hydrate	12267-73-1	Textile: 100*	ND (ND)**	µg/L
Tris(2-chloroethyl) phosphate (TCEP)	115-96-8	Textile: 25 Leather: 5	ND	µg/L
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	13674-87-8	Textile: 25 Leather: 5	ND	µg/L

* Limit refers to elemental boron, not the salt.

**Result in term of elemental boron (Result in term of the corresponding boron salt)

13. Glycols/Glycol Ethers

With reference to USEPA 8270 E or Liquid extraction followed by LC-MS or GC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Bis(2-methoxyethyl)-ether	111-96-6	50	ND	µg/L
2-ethoxyethanol	110-80-5	50	ND	µg/L
2-ethoxyethyl acetate	111-15-9	50	ND	µg/L
Ethylene glycol dimethyl ether	110-71-4	50	ND	µg/L
2-methoxyethanol	109-86-4	50	ND	µg/L
2-methoxyethylacetate	110-49-6	50	ND	µg/L
2-methoxypropylacetate	70657-70-4	50	ND	µg/L
Triethylene glycol dimethyl ether	112-49-2	50	ND	µg/L

14. Halogenated solvents

With reference to USEPA 8260 D, Purge and Trap or Headspace followed by GC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
1,2-Dichloroethane	107-06-2	1	ND	µg/L
Methylene chloride	75-09-2	1	ND	µg/L
Trichloroethene	79-01-6	1	ND	µg/L
Tetrachloroethene	127-18-4	1	ND	µg/L

15. Organotin compounds

TeET:
With reference to ISO 17353
Others:
With reference to ISO 17353 or Derivatization with $NaB(C_2H_5)_4$ followed by GC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Triclyclohexyltin (TCyHT)	Various	0.01	ND	µg/L
Tripropyltin (TPT)	Various	0.01	ND	µg/L
Dipropyltin compounds (DPT)	Various	0.01	ND	µg/L
Tetrabutyltin compounds (TeBT)	Various	0.01	ND	µg/L
Tetraoctyltin compounds (TeOT)	Various	0.01	ND	µg/L
Tetraethyltin Compounds (TeET)	Various	0.01	ND	µg/L
Mono-, di-and tri-octyltin derivatives	Various	0.01	ND	µg/L
Monooctyltin (MOT)	15231-57-9	0.01	ND	µg/L
Dioctyltin (DOT)	94410-05-6, 12531-44-4	0.01	ND	µg/L
Trioctyltin (TOT)	Various	0.01	ND	µg/L
Mono-, di-and tri-methyltin derivatives	Various	0.01	ND	µg/L
Monomethyltin (MMT)	Various	0.01	ND	µg/L
Dimethyltin (DMT)	Various	0.01	ND	µg/L
Trimethyltin (TMT)	Various	0.01	ND	µg/L
Mono-, di-and tri-butyltin derivatives	Various	0.01	ND	µg/L
Monobutyltin (MBT)	1118-46-3, 78763-54-9	0.01	ND	µg/L
Dibutyltin (DBT)	1002-53-5	0.01	ND	µg/L
Tributyltin (TBT)	56573-85-4	0.01	ND	µg/L
Mono-, di-and tri-phenyltin derivatives	Various	0.01	ND	µg/L
Monophenyltin (MPhT)	Various	0.01	ND	µg/L
Diphenyltin (DPhT)	Various	0.01	ND	µg/L
Triphenyltin (TPhT)	892-20-6, 668-34-8	0.01	ND	µg/L

16. Other/Miscellaneous Chemicals

AEEA [2-(2-aminoethylamino) ethanol]: With reference to Liquid extraction followed by LC-MS/MS

Bisphenol A: With reference to Liquid extraction followed by LC-MS

Thiourea: With reference to Liquid extraction followed by LC-MS

Quinoline: With reference to Liquid extraction followed by LC-MS

Borate, zinc salt: ISO 17294, USEPA 6010 C, USEPA 6020 A, HJ 700 or IS 3025 (Part 65)

Test Items	CAS no.	Reporting Limit (Textile)	Result	Unit
			Untreated wastewater	
AEEA [2-(2-aminoethylamino) ethanol]	111-41-1	500	ND	µg/L
Bisphenol A	80-05-7	10	ND	µg/L
Thiourea	62-56-6	50	ND	µg/L
Quinoline	91-22-5	50	91	µg/L
Borate, zinc salt	12767-90-7	100*	B: ND (ND) ** Zn: ND (ND) **	µg/L

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

** Result in term of elemental boron / zinc (Result in term of the corresponding boron / zinc salt)

17. Perfluorinated and Polyfluorinated Chemicals (PFCs)

PFCs:

With reference to USEPA 537:2020 followed by LC-MS(-MS)

FTOH:

With reference to BS EN 12673-1999, USEPA 8270 E or Derivatization with acetic anhydride followed by GC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Perfluoro-octane-sulfonic acid (PFOS)*	1763-23-1	0.01	ND	µg/L
Perfluoro-octanoic acid (PFOA)**	335-67-1	0.01	ND	µg/L
Perfluoro-octane-sulfon-amide (PFOSA)	754-91-6	0.01	ND	µg/L
1H,1H,2H,2H-Perfluorodecyl acrylate (8:2 FTA)	27905-45-9	1	ND	µg/L
1H,1H,2H,2H-Perfluorodecanol (8:2 FTOH)	678-39-7	1	ND	µg/L
N-Methyl-perfluoro-octane-sulfon-amido-ethanol (N-Me-FOSE)	24448-09-7	0.01	ND	µg/L
N-Ethyl-Perfluoro-octane-sulfon-amido-ethanol (N-Et-FOSE)	1691-99-2	0.01	ND	µg/L
N-Methyl-perfluoro-octane-sulfon-amide (N-Me-FOSA)	31506-32-8	0.01	ND	µg/L
N-Ethyl-perfluoro-octane-sulfon-amide (N-Et-FOSA)	4151-50-2	0.01	ND	µg/L
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2 FTS)	39108-34-4	1	ND	µg/L
Methyl Perfluorooctanoate (Me-PFOA)	376-27-2	1	ND	µg/L
Ethyl Perfluorooctanoate (Et-PFOA)	3108-24-5	1	ND	µg/L
8:2 Fluorotelomer methacrylate (8:2 FTMA)	1996-88-9	1	ND	µg/L

* PFOS refer to its salts/derivative including PFOS-K (CAS No.: 2795-39-3), PFOS-Li (CAS No.: 29457-72-5), PFOS-NH_4 (CAS No.: 29081-56-9), PFOS-$NH(OH)_2$ (CAS No.: 70225-14-8), PFOS-$N(C_2H_5)_4$ (CAS No.: 56773-42-3) and POSF (CAS No.: 307-35-7)

** PFOA refer to its salts including PFOA-Na (CAS No.: 335-95-5), PFOA-K (CAS No.: 2395-00-8), PFOA-Ag (CAS No.: 335-93-3), PFOA-F (CAS No.: 335-66-0) and APFO (CAS No.: 3825-26-1)

18. Phthalates – including all other esters of ortho-phthalic acid

With reference to USEPA 8270 E, ISO 18856 or Dichloromethane extraction followed by GC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	10	ND	µg/L
Dimethoxyethyl phthalate (DMEP)	117-82-8	10	ND	µg/L
Di-n-octyl phthalate (DNOP)	117-84-0	10	ND	µg/L
Di-iso-decyl phthalate (DIDP)	26761-40-0	10	ND	µg/L
Di-iso-nonyl phthalate (DINP)	28553-12-0	10	ND	µg/L
Di-n-hexyl phthalate (DnHP)	84-75-3	10	ND	µg/L
Dibutyl phthalate (DBP)	84-74-2	10	ND	µg/L
Butyl benzyl phthalate (BBP)	85-68-7	10	ND	µg/L
Dinonyl phthalate (DNP)	84-76-4	10	ND	µg/L
Diethyl phthalate (DEP)	84-66-2	10	ND	µg/L
Di-n-propyl phthalate (DPRP)	131-16-8	10	ND	µg/L
Di-iso-butyl phthalate (DIBP)	84-69-5	10	ND	µg/L
Di-cyclohexyl phthalate (DCHP)	84-61-7	10	ND	µg/L
Di-iso-octyl phthalate (DIOP)	27554-26-3	10	ND	µg/L
1,2-benzenedicarboxylic acid, di-C7-11-branched and linearakyl esters (DHNUP)	68515-42-4, 68515-50-4	10	ND	µg/L
1,2-benzenedicarboxylic acid, di-C6-8 branched and linearalkyl esters , C7-rich (DIHP)	71888-89-6, 84777-06-0	10	ND	µg/L
Di-n-pentylphthalates	131-18-0	10	ND	µg/L
Diisopentylphthalates	605-50-5	10	ND	µg/L

19. Polycyclic aromatic hydrocarbons (PAHs)

With reference to DIN 38407-39, USEPA 8270 E or Solvent extraction followed by GC-MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
Benzo(a)pyrene (BaP)	50-32-8	1	ND	µg/L
Anthracene	120-12-7	1	ND	µg/L
Pyrene	129-00-0	1	ND	µg/L
Benzo(ghi)perylene	191-24-2	1	ND	µg/L
Benzo(e)pyrene	192-97-2	1	ND	µg/L
Indeno (1,2,3-cd)pyrene	193-39-5	1	ND	µg/L
Benzo(j)fluoranthene	205-82-3	1	ND	µg/L
Benzo(b)fluoranthene	205-99-2	1	ND	µg/L
Fluoranthene	206-44-0	1	ND	µg/L
Benzo(k)fluoranthene	207-08-09	1	ND	µg/L
Acenaphthylene	208-96-8	1	ND	µg/L
Chrysene	218-01-9	1	ND	µg/L
Dibenz(a,h)anthracene	53-70-3	1	ND	µg/L
Benzo(a)anthracene	56-55-3	1	ND	µg/L
Acenaphthene	83-32-9	1	ND	µg/L
Phenanthrene	85-01-8	1	ND	µg/L
Fluorene	86-73-7	1	ND	µg/L
Naphthalene	91-20-3	1	ND	µg/L

20. Restricted Aromatic Amines (Cleavable from Azo-colourants)

With reference to USEPA 8270 E or Reduction step with sodium dithionite, solvent extraction followed by GC-MS and LC-MS/MS

Test Items	CAS no.	Reporting Limit (Textile and Leather)	Result	Unit
			Untreated wastewater	
4,4'-Methylene-bis(2-chloroaniline)	101-14-4	0.1	ND	µg/L
4,4'-Diaminodiphenylmethane	101-77-9	0.1	ND	µg/L
4,4'-Oxydianiline	101-80-4	0.1	ND	µg/L
4-Chloroaniline	106-47-8	0.1	0,2	µg/L
3,3'-Dimethoxybenzidine	119-90-4	0.1	ND	µg/L
3,3'-Dimethylbenzidine	119-93-7	0.1	ND	µg/L
p-Cresidine	120-71-8	0.1	ND	µg/L
2,4,5-Trimethylaniline	137-17-7	0.1	ND	µg/L
4,4'-Thiodianiline	139-65-1	0.1	ND	µg/L
4-Aminoazobenzene	60-09-3	0.1	ND	µg/L
2,4-Diaminoanisole	615-05-4	0.1	ND	µg/L
3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	0.1	ND	µg/L
2,6-Xylidine	87-62-7	0.1	ND	µg/L
o-Anisidine	90-04-0	0.1	ND	µg/L
2-Naphthylamine	91-59-8	0.1	ND	µg/L
3,3'-Dichlorobenzidine	91-94-1	0.1	ND	µg/L
4-Aminobiphenyl	92-67-1	0.1	ND	µg/L
Benzidine	92-87-5	0.1	ND	µg/L
o-Toluidine	95-53-4	0.1	ND	µg/L
2,4-Xylidine	95-68-1	0.1	ND	µg/L
4-Chloro-o-toluidine	95-69-2	0.1	ND	µg/L
2,4-Diaminotoluene	95-80-7	0.1	ND	µg/L
o-Aminoazotoluene	97-56-3	0.1	ND	µg/L
5-Nitro-o-toluidine	99-55-8	0.1	ND	µg/L
2-Naphthylammoniumacetate	553-00-4	0.1	ND	µg/L
2,4,5-trimethylaniline hydrochloride	21436-97-5	0.1	ND	µg/L
4-chloro-o-toluidinium chloride	3165-93-3	0.1	ND	µg/L
4-methoxy-m-phenylene diammonium sulphate; 2,4-diaminoanisole sulphate	39156-41-7	0.1	ND	µg/L

21. UV Absorbers

With reference to ISO 22032, USEPA 527, USEPA 8270 E, USEPA 8321 B or Dichloromethane extraction followed by GC-MS or LC-MS(-MS)

Test Items	CAS no.	Reporting Limit (Textile)	Result	Unit
			Untreated wastewater	
2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec- butyl) phenol (UV-350)	36437-37-3	100	ND	µg/L
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1	100	ND	µg/L
2-benzotriazol-2-yl-4,6-di-tertbutylphenol (UV-320)	3846-71-7	100	ND	µg/L
2,4-Di-tert-butyl-6-(5-chlorobenzotriazole-2-yl) phenol (UV-327)	3864-99-1	100	ND	µg/L

22. Volatile organic compounds (VOCs)

Benzene: With reference to ISO 11423-1, ISO 20595, USEPA 8260 D, Purge and Trap or Headspace followed by GC-MS

m-cresol / o-cresol / p-cresol: With reference to BS EN 12637-1999, ISO 11423-1, USEPA 8270 E, Purge and Trap or Headspace followed by GC-MS

Xylene: With reference to ISO 11423-1, USEPA 8260 D, Purge and Trap or Headspace followed by GC-MS

Toluene: With reference to ISO 11423-1, USEPA 8260 D or HJ 1067

Test Items	CAS no.	Reporting Limit	Result	Unit
			Untreated wastewater	
Benzene	71-43-2	Textile and Leather: 1	ND	µg/L
Xylene	1330-20-7	Textile: 1	ND	µg/L
o-cresol	95-48-7	Textile and Leather: 1	ND	µg/L
p-cresol	106-44-5	Textile and Leather: 1	ND	µg/L
m-cresol	108-39-4	Textile and Leather: 1	ND	µg/L
Toluene	108-88-3	Textile: 1 (Sample and Report only for mock leather)	ND	µg/L

Remark

ND = Not detected
NA = Not applicable
NC = Not conducted
- = Not required to be tested
(S) = The analysis was subcontracted to xxxxx lab for testing.
= Non accredited parameter

SLUDGE

23. Sludge Parameters - Step 1 – Conventional

pH: USEPA 9045 D or HJ 962

% Solids: USEPA 160.3 or HJ 613 at 105°C

Paint Filter Test: USEPA SW-846 or USEPA 9095 B

Fecal Coliform: USEPA 1681

Test Items	CAS no.	Limit							Reporting Limit	Result	Unit
		Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G		Sludge	
pH	-	Sample and Report Only	Sample and Report Only	5-11	5-11	5-11	6.5-9	6.5-9	-	7.75	s.u.
% Solids	-	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	-	27,45	%
Paint Filter Test	-	Sample and Report Only	Sample and Report Only	Sample and Report Only	Pass	Pass	Pass	Sample and Report Only	-	Not Observed	-
Fecal Coliform	-	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	Sample and Report Only	1000	1000	1000	2212	MPN/g

24. Sludge Parameters – Step 1 – Anions

Preparation: USEPA 9013

Analysis: USEPA 9014, USEPA 9213 or HJ 745

Test Items	CAS no.	Limit – Dry weight							Reporting Limit (Textile)	Result	Unit
		Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G		Sludge	
Cyanide	-	Sample and Report Only	Sample and Report Only	100	85	70	70	70	20	ND	mg/kg

25. Sludge Parameters – Step 1 – Metals

Sb, As, Cr, Co, Cd, Cu, Pb, Ni, Zn: Preparation: USEPA 3050 Analysis: USEPA 6010 D, USEPA 6020 B or HJ 803

Cr VI: Preparation: USEPA 3060 A Analysis: USEPA 7196 or USEPA 7199

Ba, Se, Ag: Preparation: USEPA 3050 Analysis: USEPA 6010 D or USEPA 6020 B

Hg: Preparation: option 1: USEPA 7471 B option 2: USEPA 3051 A Analysis: option 1: USEPA 7471 B, option 2: USEPA 6020 B or GB/T 22105.1 or HJ 923

Test Items	CAS no.	Limit – Dry weight		Reporting Limit	Result	Unit
		Total Metals Threshold Values*	Max Total Metals limit for Pathway G		Sludge	
Arsenic (As)	Various	10	75	Textile: 5 Leather 2	ND	mg/kg
Cadmium (Cd)	Various	3	85	Textile: 1 Leather 2	ND	mg/kg
Mercury (Hg)	Various	1	57	Textile: 1 Leather 0.2	ND	mg/kg
Lead (Pb)	Various	10	840	Textile: 5 Leather 2	8	mg/kg
Antimony (Sb)	Various	12	Sample and Report Only	Textile: 5	ND	mg/kg
Cobalt (Co)	Various	1600	Sample and Report Only	Textile: 400	ND	mg/kg
Nickel (Ni)	Various	70	420	Textile: 20	50	mg/kg
Silver (Ag)	Various	100	Sample and Report Only	Textile: 50	ND	mg/kg
Copper (Cu)	Various	200	4300	Textile: 50	178	mg/kg
Zinc (Zn)	Various	1000	7500	Textile: 400	660	mg/kg
Total Chromium (Cr)	Various	100	3000	Textile: 50	95	mg/kg
Chromium VI (Cr VI)	Various	50	50	Textile: 20 Leather 2	ND	mg/kg
Barium (Ba)	Various	700	Sample and Report Only	Textile: 200	542	mg/kg
Selenium (Se)	Various	10	100	Textile: 5	ND	mg/kg

* Leachate should be tested if Total Metals Threshold Values is exceeded in sludge.

26. Sludge Parameters - Step 1 - MRSL - Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers

NP/OP: Preparation: With reference to USEPA 3540 / 3541 - Soxhlet or USEPA 3550 - Ultrasonic

Analysis: With reference to ISO 18857-2 or ASTM D7065

NPEO/OPEO: Preparation: With reference to USEPA 3540 / 3541 - Soxhlet or USEPA 3550 - Ultrasonic

Analysis: With reference to ISO 18254-1, ISO 18857-2 or ASTM D7065

Test Items	CAS no.	Limit – Dry weight							Reporting Limit (Textile and Leather)	Result	Unit
		Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G		Sludge	
Octylphenol (OP)	140-66-9/ 1806-26-4/ 27193-28-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.4	0.4	0.4	0.4	0.4	ND	mg/kg
Nonylphenol (NP)	104-40-5/ 11066-49-2/ 25154-52-3/84852-15-3	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.4	0.4	0.4	0.4	0.4	ND	mg/kg
Octylphenolethoxylates (OPEOs)	9002-93-1/9036-19-5/68987-90-6	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.4	0.4	0.4	0.4	0.4	ND	mg/kg
Nonylphenolethoxylates (NPEOs)	9016-45-9/26027-38-3/ 37205-87-1/68412-54-4/127087-87-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.4	0.4	0.4	0.4	0.4	ND	mg/kg

27. Sludge Parameters - Step 1 - MRSL – Polycyclic Aromatic Hydrocarbons (PAHs)

Preparation: With reference to USEPA 3540 / 3541 - Soxhlet or USEPA 3550 - Ultrasonic

Clean-up: With reference to USEPA 3640

Analysis: With reference to USEPA 8270 E or HJ 805-2016

Test Items	CAS no.	Limit – Dry weight							Reporting Limit (Textile)	Result	Unit
		Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G		Sludge	
Benzo(a)pyrene (BaP)	50-32-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Anthracene	120-12-7	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Pyrene	129-00-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Benzo(ghi)perylene	191-24-2	Sample and Report	Sample and Report	Sample and Report	0.2	0.2	0.2	0.2	0.2	ND	mg/kg

		Only	Only	Only							
Benzo(e)pyrene	192-97-2	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Indeno (1,2,3-cd)pyrene	193-39-5	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Benzo(j)fluoranthene	205-82-3	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Benzo(b)fluoranthene	205-99-2	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Fluoranthene	206-44-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Benzo(k)fluoranthene	207-08-09	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Acenaphthylene	208-96-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Chrysene	218-01-9	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Dibenz(a,h)anthracene	53-70-3	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Benzo(a)anthracene	56-55-3	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Acenaphthene	83-32-9	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Phenanthrene	85-01-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Fluorene	86-73-7	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Naphthalene	91-20-3	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg

28. Sludge Parameters - Step 1 - MRSL – Chlorotoluenes

Preparation: With reference to USEPA 3540 / 3541 - Soxhlet or USEPA 3550 - Ultrasonic

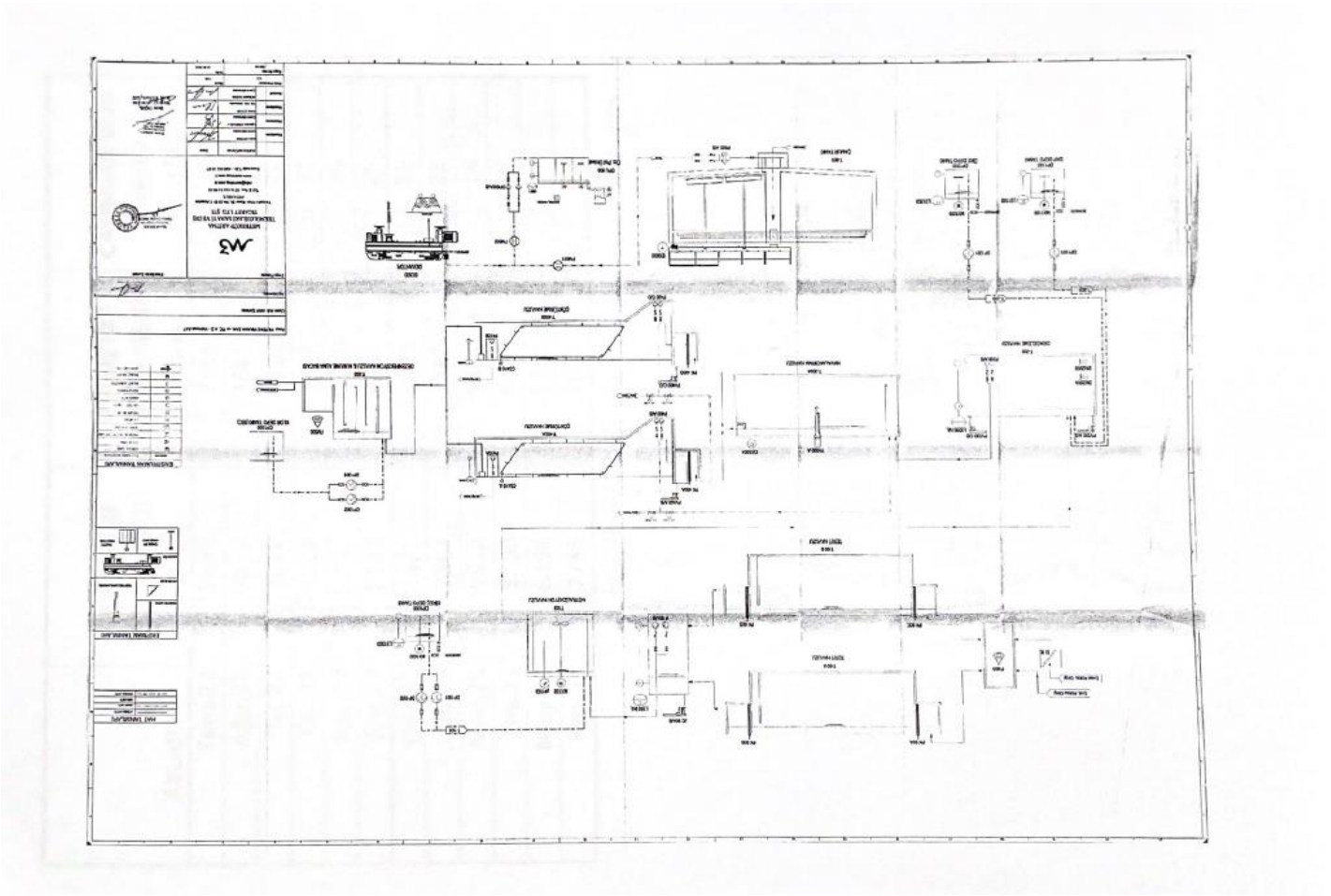
Clean-up: With reference to USEPA 3640

Analysis: With reference to USEPA 8270 E or HJ 605

Test Items	CAS no.	Limit – Dry weight							Reporting Limit (Textile and Leather)	Result	Unit
		Pathway A	Pathway B	Pathway C	Pathway D	Pathway E	Pathway F	Pathway G		Sludge	
2-Chlorotoluene	95-49-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
3-Chlorotoluene	108-41-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
4-Chlorotoluene	106-43-4	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,3-Dichlorotoluene	32768-54-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,4-Dichlorotoluene	95-73-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,5-Dichlorotoluene	19398-61-9	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,6-Dichlorotoluene	118-69-4	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
3,4-Dichlorotoluene	95-75-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
3,5-Dichlorotoluene	25186-47-4	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,3,4-Trichlorotoluene	7359-72-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,3,6-Trichlorotoluene	2077-46-5	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,4,5-Trichlorotoluene	6639-30-1	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg

2,4,6-Trichlorotoluene	23749-65-7	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
3,4,5-Trichlorotoluene	21472-86-6	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,3,4,5-Tetrachlorotoluene	76057-12-0	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,3,5,6-Tetrachlorotoluene	29733-70-8	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
2,3,4,6-Tetrachlorotoluene	875-40-1	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg
Pentachlorotoluene	877-11-2	Sample and Report Only	Sample and Report Only	Sample and Report Only	0.2	0.2	0.2	0.2	0.2	ND	mg/kg

PIPING PLAN



SAMPLING PHOTOS

UNTREATED WASTEWATER

GPS Data: 41°12'09" N, 27°51'17" E

SAMPLING LOCATION, CLOSE-UP VIEW

SAMPLING LOCATION, FAR VIEW

EFFLUENT

GPS Data: 41°12'09" N, 27°51'17" E

SAMPLING LOCATION, CLOSE-UP VIEW

SAMPLING LOCATION, FAR VIEW

SLUDGE
Date % Time of Measurement 30-05-2023 - 13:00
SAMPLING LOCATION, CLOSE-UP VIEW

REGULATORY REQUIREMENTS TURKEY LOCAL DISCHARGE REGULATION

TEXTILE INDUSTRY WASTEWATER DISCHARGE STANDARDS OF THE RECEIVING ENVIRONMENT

Table 4: Textile Industry (Wool Washing, Finishing, weaving and etc.)			
PARAMETER	UNIT	**COMPOSITE SAMPLE 2 HOURS**	**COMPOSITE SAMPLE 24 HOURS**
CHEMICAL OXYGEN DEMAND (COD)	(mg/L)	400	300
SUSPENDED SOLIDS	(mg/L)	400	300
AMMONIUM NITROGEN (NH4-N)	(mg/L)	5	-
FREE CHLORINE	(mg/L)	0.3	-
TOTAL CHROMIUM	(mg/L)	2	1
SULFUR (S^{-2})	(mg/L)	0.1	-
SULPHITE	(mg/L)	1	-
OIL AND GREASE	(mg/L)	200	100
FISH BIOTEST		4	3
pH		6....9	6....9
COLOR	(Pt-Co)	280	260